November 26, 2013

MEMORANDUM TO THE BOARD OF DIRECTORS

FROM: **Engineering and Environment Division**

RE: **Revision of Ex-Im Bank's Supplemental Environmental Guidelines for High Carbon Intensity Projects, as set forth in Annex II of Ex-Im Bank's "Environmental and Social Due Diligence Procedures and Guidelines"**

Summary

Ex-Im Bank's Engineering and Environment Division (E&E) is recommending that the current version of Ex-Im Bank's Supplemental Guidelines for High Carbon Intensity Projects ("Supplemental Carbon Guidelines") be revised to reflect new environmental requirements for power plants and heat producing plants that are fueled by coal. The major changes proposed in Supplemental Carbon Guidelines, further detailed below, include:

- Requirement for high carbon intensity projects to deploy carbon capture and sequestration if not located in one of the "world's poorest countries"
- High carbon intensity plants in "poorest countries" required to use the most efficient coal technology available and evidence that there is no other economically feasible alternative
- Elimination of the early Board of Directors review for high carbon intensity projects

Background

On June 24, 2013, the President announced a Climate Action Plan (CAP) to reduce carbon pollution, which included a call for an end to public support for most new coal plants unless those plants meet certain environmental requirements. (See Attachment 4 for excerpts of the CAP fact sheet.) In response to the President's announcement, Ex-Im Bank Chairman and President Fred P. Hochberg said, "As president of the Ex-Im Bank, I am committed to working with the Bank's Board of Directors to implement President Obama's new initiative to reduce greenhouse gas emissions, including his call to end public financing for most new coal-fired power plants overseas." (Attachment 5)

Following the Chairman's announcement, Ex-Im Bank participated in interagency meetings at which the scope of the President's announcement regarding overseas coal plants and other international aspects of the CAP were discussed. Ex-Im Bank stated its position as an independent agency, which was recognized by the other participants.

Ex-Im Bank's current Supplemental High Carbon Intensity Guidelines were originally approved by the Bank's Board of Directors in March 2010, following the Board's approval of the Bank's Carbon Policy in November 2009. The proposed Supplemental Carbon Guidelines build upon the informational requirements set forth in the current Guidelines, in keeping with the objectives of the Bank's existing Carbon Policy and scientific and other developments in the climate change arena, including the EPA's designation of CO_2 as a pollutant. In conjunction with action to revise the Bank's Supplemental Carbon Guidelines, Ex-Im Bank staff, through the Policy Division and with other agencies is working to bring other countries into alignment with the CAP. (Attachment 8 describes these international. efforts.)

The Staff has followed the same process for proposing this revision to its Environmental and Social Due Diligence Procedures and Guidelines (Guidelines) that it has taken each time it has recommended that the Guidelines be approved or revised since they were first approved in April 1995. In late September, a draft of the Supplemental Carbon Guidelines was formulated and circulated within the Bank and subsequently to Ex-Im Bank customers (exporters and trade associations), other U.S. Government agencies (Treasury, State, Commerce, EPA, OPIC and CEQ), Bank stakeholders (environmental NGOs), and members of the 2013 Environmental Subcommittee of Ex-Im Bank's Advisory Committee. In addition, the proposed draft of the revised Supplemental Carbon Guidelines was posted on the Ex-Im Bank website.

On October 30, Ex-Im Bank hosted separate open meetings (vetting sessions that were chaired by the E&E Division assisted by OGC and Policy), first with environmental NGOs and subsequently with exporters and trade associations to obtain their comments and feedback to the draft revision. Formal written comments from these parties were submitted in early November. Attachment 6 contains a summary of the comments and feedback made by attendees of the October 30 meetings, and Attachment 7 contains the sixteen written comments received from NGOs, exporters, trade associations and other USG Agencies. The large number of attendees who participated in the meetings, coupled with the number of submitted written comments, reflects a very strong interest by outside parties in this proposed revision to the Supplemental Carbon Guidelines.

Taking into account the feedback, comments and suggestions received from Ex-Im Bank Directors, environmental stakeholders, exporters, trade associations and other USG Agencies, the September draft revision to the Supplemental Carbon Guidelines has been revised and is now presented for Board approval. Attachment 1 contains a clean version of the final recommended revision and Attachment 2 contains a "black-line" comparison between this current proposed version and the draft circulated in Included in the black-line version are staff comments showing the reasons for the changes to the September draft.

Major Proposed Changes to the Supplemental Carbon Guidelines

- Definition of high carbon intensity projects expanded expressly to include all plants that use coal as a fuel source, while the definition for other (non-coal) high carbon intensity projects remains as defined in the current Supplemental Carbon guidelines.

- Exclusions from the definition of "high carbon intensity project" -- such as exports to most coal mines -- are listed

- Guidelines are defined that require the deployment of carbon capture and sequestration for high carbon intensity plants that are not in the world's poorest countries sufficient to reduce emissions to 500 grams CO2/kWh or less

- Guidelines and information requirements are set forth for high carbon intensity plants that are located in the world's poorest countries: plants must use the most efficient coal technology available and evidence that there is no other economically feasible alternative

- Provisions are made for the engagement of an independent environmental consultant to review information submitted in conjunction with applications for high carbon intensity projects

- The "early due diligence review process" for high carbon intensity projects contained in the current Supplemental Carbon Guidelines will no longer be required

- "Poorest countries" to be International Development Assistance-only ("IDA-only") countries identified by the World Bank as the world's poorest countries. The list is to be maintained on the Ex-Im website and updated by staff as needed.

List of Attachments

Attachment 1	**Proposed Revision of the Supplemental Guidelines for high Intensity Carbon Projects, designated as "Annex II" to Ex-Im Bank's Environmental and Social Due Diligence Procedures and Guidelines**
Attachment 2	**Blackline comparison showing changes reflected between current proposed Revision and the Draft Revision circulated in late September to exporters, NGOs and other USG Agencies**
Attachment 3	**Definition and listing of the "World's Poorest Countries"**
Attachment 4	**Excerpt of President Obama's plan to "Cut Carbon Pollution" fact sheet**
Attachment 5	**Chairman Hochberg's June 25th Statement in response to the President's Carbon Action Plan**
Attachment 6	**Summary of feedback and comments received at the October 30 meetings with NGOs and with the exporters and trade groups to vet the draft revision**
Attachment 7	**Copies of the written comments on the Draft Revision submitted to Ex-Im Bank**
Attachment 8	**Efforts being taken to convince other countries to adopt similar measures to reduce carbon emissions**

Recommendation

It is recommended that Ex-Im Bank adopt the revised version of the Supplemental Carbon Guidelines as set forth in Attachment 1, to remain in effect until such time as it may subsequently be reviewed for extension or modification by the Board of Directors.

Stephen C. Parsons
Engineering and Environment

James A. Mahoney
V.P., Engineering and Environment

Concur:

Tracey E. Braun
Office of the General Counsel

Kenneth M. Tinsley
Senior V.P., Credit Management

Attachment 1

ANNEX A-2 Draft Nov. 18, 2013

SUPPLEMENTAL GUIDELINES FOR HIGH CARBON INTENSITY PROJECTS

Under Ex-Im Bank's environmental policy, the Bank will not provide support for exports for high carbon intensity plants, except for high carbon intensity plants that (a) are located in the world's poorest countries, utilize the most efficient coal technology available and where no other economically feasible alternative exists, or (b) deploy carbon capture and sequestration (CCS), in each case, in accordance with the requirements set forth in these Supplemental Guidelines.

I. Scope of Supplemental Guidelines

a. The Supplemental Guidelines set forth in this Annex apply to all final applications for financing that cover exports to high carbon intensity plants (as defined below) for which construction is planned, which are undergoing construction, or which have entered into operation.

b. "High carbon intensity plant" is defined as:
   i. Any plant that uses coal as a source of fuel for the generation of power or for the production of heat, including combined heat and power (CHP) plants; or
   ii. Any portion of a project that consists of a new coal-fired plant (power, heating or CHP) and a new mine developed as an integrated project by a single sponsor or owner or by affiliated sponsors/owners (often referred to as a mine-mouth coal power (and/or heat) generation plant); or
   iii. Any (non-coal) fossil fuel plant (power, heating or CHP) that is expected to produce annual direct greenhouse gas (GHG) emissions equivalent to a level greater than 700 grams of carbon dioxide per kilowatt-hour of generated electricity (grams CO_2/kWh) equivalent, based on its gross output, and consists of a plant unit (or units) that have a gross electric generating capacity (and/or equivalent heat production capacity) greater than 50 MW.

c. These Supplemental Guidelines do <u>not</u> apply to:
   i. Applications for financing covering exports either to existing coal mines or to new coal mines that are <u>not</u> part of an integrated coal-fired plant project as described in I.b (ii) above; and
   ii. Applications for financing covering exports to projects (including industrial, manufacturing, natural resource extraction, chemical, refinery or material processing projects) that use the output (heat or electric power) produced (or to be produced) by a high carbon intensity plant, to the extent that no Ex-Im Bank financing is used to cover exports or local goods or services to the project's high carbon intensity plant, *i.e.*, financing must cover only exports or local goods or services that are exclusively for the downstream part of the project, and no financing is used to cover exports to the power (or heat) generation part of the project; and
   iii. Applications for financing covering exports to hybrid plants which use two generation sources, a high carbon intensity source and a renewable energy source

(including coal plants using "solar boost" techniques), that have an aggregate annual carbon intensity of 500 grams CO_2/Kwh or less, based on its gross output. Where the hybrid plant's aggregate annual carbon intensity exceeds 500 grams CO_2/kWh, only those exports used for the renewable energy portion of the plant will be exempt from these Supplemental Guidelines; and

iv. Applications for financing covering exports to upgrade or retrofit existing high carbon intensity plants where the upgrade or retrofit to the plant does not materially extend the plant's originally designated useful life. Examples of permissible exports to upgrade or retrofit include: exports to control or reduce emissions of particulate matter, NO_x, mercury or sulfur dioxide, plant controls, mechanical equipment or switchgear replacement, including nominal maintenance and operational service and replacement parts, but not boiler or turbine generator replacement.

II. Supplemental Guidelines for High Carbon Intensity Plants

a. Applications for financing covering exports for high carbon intensity plants that are located in the "World's Poorest Countries" as listed on Ex-Im Bank's web site at: http/www.exim.gov/poorestcountries must be accompanied by each of the following:

i. Information demonstrating that the high carbon intensity plant will utilize the most efficient technology available, i.e., the best appropriate technology available to the country where the plant is located, reflecting the capabilities of the country and feasible options to produce power at the most efficient level practical. All design, engineering and plant operational characteristics will be taken into account, including the plant's size and design, coal quality and characteristics, cooling system and emission controls. In the case of a retrofit or upgrade, the retrofit or upgrade must utilize the most efficient technology available as described above; and

ii. An alternatives analysis demonstrating that there are no other economically feasible alternatives to the new high carbon intensity plant. The analysis should include comparisons of the financial and economic cost of the plant with other viable sources of power and/or heat production or savings that have lower carbon intensities including renewable energy, end use efficiencies, energy transmission/distribution improvements, energy policy reforms (where applicable)or fossil fuels that produce lower levels of carbon emissions that could be an alternative to, supplement, or partial substitute for the power to be generated by the high carbon intensity plant. Economic costs should include subsidies and externalities, such as the social cost of carbon emissions, even if not quantified. The analysis should compare all technically available options to reduce or offset the plant's expected production of CO_2 during its operation (including the option to deploy carbon capture and sequestration (CCS)) and take into account any current or projected costs associated with CO_2 production such as fees, taxes or regulatory compliance costs. In the case of a retrofit or upgrade, the alternatives analysis should compare the plant as retrofitted or upgraded to other sources of power as described above; and

iii. An analysis of the expected level of CO_2 production of the high carbon intensity plant that quantifies all direct emissions (Scope 1 emissions as defined in the

Greenhouse Gas Protocol http://www.ghgprotocol.org/standards from the plant, including information related to the carbon content of the fuel source the plant's projected availability and its level of efficiency; and

iv. Information demonstrating the extent to which the high carbon intensity plant will align with the objectives of any applicable low carbon growth plans of the country where it is located, including any mitigation measures contemplated, as reflected by the degree to which the plant may be designed as "CCS ready" or its output supplemented by renewable energy.

b. Applications for financing covering exports to high carbon intensity plants that are not located in the "World's Poorest Countries" (as described above) must be deployed with a carbon capture and sequestration (CCS) system sufficient to reduce the plant's equivalent carbon intensity to a level of 500 grams CO_2/kWh or less based on its gross output. The CCS system must be fully functional within one year of a new plant's commercial operation, or within one year of the completion of an upgrade or retrofit to an existing plant. In the post combustion CCS process, the CO_2 from the emissions produced by the high carbon intensity plant must be separated from the emissions stream and transported to a storage site for the purpose of environmentally safe and permanent geological storage of the carbon. Alternately, a CCS system may be employed to capture and permanently store the CO_2 produced by a coal gasification process, prior to the combustion of the processed gas (syngas) by the power plant, in which case the level of CCS must be sufficient to reduce the combined carbon intensity of the gasifier and the power plant to a level of 500 grams CO_2/kWh or less.

III. Engagement of an Independent Environmental Consultant to Ex-Im Bank

The Engineering & Environment Division of Ex-Im Bank may require the engagement of an independent consultant on behalf of Ex-Im Bank, at the expense of the applicant for financing or other relevant party, among other things, to review the information submitted in connection with an application for financing under these Supplemental Guidelines. The consultant may supplement the information with additional information relevant to the plant's greenhouse gas production, as required by these Supplemental Guidelines and as otherwise requested by Ex-Im Bank, in order to aid Ex-Im Bank in its analysis of the application for financing under these Supplemental Guidelines.

ANNEX A-2 DRAFT NOV 18, 2013 ***(ATTACHMENT 2)***

SUPPLEMENTAL GUIDELINES FOR HIGH CARBON INTENSITY PROJECTS

Under Ex-Im Bank's environmental policy, the Bank will not provide support for exports for high carbon intensity plants, except for high carbon intensity plants that (a) are located in the world's poorest countries ~~that~~, utilize the most efficient coal technology available and where no other economically feasible alternative exists, or (b) deploy carbon capture and sequestration~~.~~ (CCS), in each case, in accordance with the requirements set forth in these Supplemental Guidelines.

I. Scope of Supplemental Guidelines

a. The Supplemental Guidelines set forth in this Annex apply to all final applications for financing that cover exports ~~for~~to high carbon intensity plants (as defined below) for which construction is planned, which are undergoing construction, or which have entered into operation.

b. "High carbon intensity ~~plants" are~~plant" is defined as:
   i. ~~Plants~~Any plant that ~~use~~uses coal as a source of fuel~~:~~ for the generation of power or for the production of heat, including combined heat and power (CHP) plants; or
   ii. Any portion of a project that consists of a new coal-fired plant (power, heating or CHP) and a new mine developed as an integrated project by a single sponsor or owner or by affiliated sponsors/owners (often referred to as a mine-mouth coal power (and/or heat) generation plant~~. *i.e.*, exports to either the coal mine portion and/or to the power plant portion of the integrated mine-mouth plant:)~~, or
   iii. ~~Fossil~~Any (non-coal) fossil fuel plant (power ~~generation plants~~, heating or CHP) that ~~produce or are~~is expected to produce annual direct greenhouse gas (GHG) emissions equivalent to a level greater than ~~650~~700 grams of carbon dioxide per kilowatt-hour of generated electricity (grams CO_2/kWh) equivalent~~; or~~
   ~~iv.~~iii. ~~Combined heat and power (CHP) plants~~, based on its gross output, and~~/or heating plants that produce or are expected to produce direct GHG emissions~~ consists of a plant unit (or units) that have a gross electric generating capacity (and/or equivalent ~~to a level~~heat production capacity) greater than ~~650 grams CO_2/kWh equivalent.~~ 50 MW.

c. These Supplemental Guidelines do not apply to:
   i. Applications for financing covering exports either to existing coal mines or to new coal mines that are not part of an integrated coal-fired plant project as described in I.b (ii) above; and
   ~~i.~~ii. Applications for financing covering exports to projects (including industrial, manufacturing, natural resource extraction, chemical, refinery or material processing projects) that use the output (heat or electric power)

Comment [TEB1]: Clarification

Comment [TEB2]: Clarification

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Comment [TEB3]: Reversion to the cut-off in the previous high carbon intensity guidelines – avoid the unintended capture of other non-coal plants in the definition.

Comment [TEB4]: For clarity, (iii) and (iv) have been merged

Comment [TEB5]: Sargent & Lundy comment

Comment [TEB6]: GE and Caterpillar comment – also consistent with IFC application of environmental standards to plants exceeding 50 MW

Comment [TEB7]: Clarification: Vermeer and National Mining Association were confused and thought all coal mines were covered by the Supplemental Guidelines.

produced (or to be produced) by a high carbon intensity plant, to the extent that no Ex-Im Bank financing is used to cover exports or local goods or services to the project's high carbon intensity plant, *i.e.*, financing must cover only exports or local goods or services that are exclusively for the downstream part of the project, and no financing is used to cover exports to the power (or heat) generation part of the project; ~~or~~and

~~ii.~~iii. Applications for financing covering ~~certain~~ exports to hybrid plants which use two generation sources, a high carbon intensity source and a renewable energy source~~, or~~ (including coal plants using "solar boost" techniques ~~where~~), that have an aggregate annual carbon intensity of 500 grams CO_2/Kwh or less, based on its gross output. Where the hybrid plant's aggregate annual carbon intensity exceeds 500 grams CO_2/kWh, only those exports ~~financed are~~ used ~~exclusively~~ for the renewable energy portion of the plant~~.~~ will be exempt from these Supplemental Guidelines; and ~~to the extent that no financing is used to cover exports or local goods or services to any part of the project's high carbon intensity source; or~~

~~iii.~~iv. Applications for financing covering exports to upgrade or retrofit existing high carbon intensity plants where the upgrade or retrofit to the plant does not ~~increase the capacity of the plants and/or~~ materially extend ~~its~~the plant's originally designated useful life~~, *e.g.*,~~. Examples of permissible exports ~~for equipment such as~~ to upgrade or retrofit include: exports to control or reduce emissions of particulate matter, NO_x, mercury or sulfur dioxide ~~scrubbers or~~, plant controls, mechanical equipment or switchgear replacement, including nominal maintenance and operational service and replacement parts, but not ~~for a new~~boiler or turbine generator ~~or boiler re-tubing~~ replacement.

Comment [TEB8]: Clarification in response to a Director's comment that hybrid plants that already met the 500 gram standard should be exempt from the Supplemental Guidelines.

Comment [TEB9]: Sargent & Lundy and CURC (Coal Utilization Research Council) commented that one consequence of efficiency improvements may be increased capacity.

Comment [TEB10]: Vermeer comment

Comment [TEB11]: Clarification

II. Supplemental Guidelines for High Carbon Intensity Plants

a. Applications for financing covering exports for high carbon intensity plants that are located in the "World's Poorest Countries" as listed on Ex-Im Bank's web site at: ~~[~~http/www.exim.gov/poorestcountries~~] [*See Attachment 1 for current list*]~~ must be accompanied by each of the following:

Comment [TEB12]: List will be maintained on the Ex-Im website

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i. Information demonstrating that the high carbon intensity plant will utilize the most efficient technology available~~. This represents~~, i.e., the best appropriate technology available ~~in~~to the country where the plant is located ~~and reflects~~, reflecting the capabilities of the country and feasible options to produce power at the most efficient level practical. All design, engineering and plant operational characteristics will be taken into account, including the plant's ~~boiler~~ size and design, coal quality and characteristics, cooling system and emission controls. In the case of a retrofit or upgrade, the retrofit or upgrade must utilize the most efficient technology available as described above.; and

Comment [TEB13]: State Department comment

ii. An alternatives analysis demonstrating that there are no other economically feasible alternatives to the new high carbon intensity plant.

The analysis should include comparisons of the financial and economic cost of the plant with other viable sources of power and/or heat ~~available to the buyer~~production or savings that have lower carbon intensities including renewable energy~~—~~; end use efficiencies, energy transmission/distribution improvements, energy policy reforms (where applicable)or fossil fuels that produce lower levels of carbon emissions that could be an alternative to, supplement, or partial substitute for the power to be generated by the high carbon intensity plant. ~~It also~~Economic costs should include subsidies and externalities, such as the social cost of carbon emissions, even if not quantified. The analysis should compare all technically available options to reduce or offset the plant's expected production of CO_2 during its operation (including the option to deploy ~~CCS)~~ carbon capture and sequestration (CCS)) and take into account any current or projected costs associated with CO_2 production such as fees, taxes or regulatory compliance costs. In the case of a retrofit or upgrade, the alternatives analysis should compare the plant as retrofitted or upgraded to other sources of power as described above.~~:~~; and

iii. An analysis of the expected level of CO_2 production of the high carbon intensity plant that quantifies all direct emissions (Scope 1 emissions as defined in the Greenhouse Gas Protocol ~~(http://www.ghgprotocol.org/standards)~~ from the plant, including information ~~demonstrating how the estimated amount of CO_2 emissions was derived. Such information should include data~~ related to the carbon content of the fuel source~~.~~ the plant's projected availability and ~~factors used in deriving the plant's~~its level of efficiency~~.~~; and

iv. Information demonstrating the extent to which the high carbon intensity plant will align with the objectives of any applicable low carbon growth plans of the country where it is located, including any mitigation measures contemplated, as reflected by the degree to which the plant may be designed as "CCS ready" or its output supplemented by renewable energy.

b. Applications for financing covering exports ~~for~~to high carbon intensity plants that are not located in the "World's Poorest Countries" (as described above) must be deployed with a carbon capture and sequestration (CCS) system sufficient to reduce the plant's equivalent carbon intensity to a level of 500 grams CO_2/kWh or less~~.~~ based on its gross output. The CCS system must be fully functional within one year of a new plant's ~~initial~~commercial operation, or within one year of the completion of an upgrade or retrofit to an existing plant. In the post combustion CCS process, the CO_2 from the emissions produced by the high carbon intensity plant must be separated from the emissions stream and transported to a storage site for the purpose of environmentally safe and permanent geological storage of the carbon. Alternately, a CCS system may be employed to capture and permanently store the CO_2 produced by a coal gasification process, prior to the combustion of the processed gas (syngas) by the power plant, in which case the level of CCS ~~should~~must be sufficient to reduce

Comment [TEB14]: NGO Group (Pacific Environment, Rainforest Action Network, Euronatura, ODG-Debtwatch, The Corner House, Market Forces, Center for International Environmental Law, Both ENDS, Center for Biological Diversity, Friends of the Earth, Amis de la Terre), Sierra Club comments

Comment [TEB15]: Sierra Club comments

Comment [TEB16]: National Resource Council, Sierra Club comments

Comment [TEB17]: NGO Group, Sierra Club and Oil Change International comments

Comment [TEB18]: "Poorest country" exception does not have a carbon intensity standard that must be met, so this level of detailed analysis is not necessary.

Comment [TEB19]: Clarification – establishes a ascertainable date.

Comment [TEB20]: Sierra Club comment

the combined carbon intensity of the gasifier and the power plant to a level of 500 grams CO_2/kWh or less.

III. Engagement of an Independent Environmental Consultant to Ex-Im Bank

The Engineering & Environment Division of Ex-Im Bank may require the engagement of an independent consultant on behalf of Ex-Im Bank, at the expense of the ~~buyer~~applicant for financing or other relevant party, among other things, to review the information submitted in connection with ~~the~~an application for financing ~~of exports in connection with the transaction~~ under these Supplemental Guidelines. The consultant may supplement the information with additional information relevant to the plant's greenhouse gas production, as required by these Supplemental Guidelines and as otherwise requested by Ex-Im Bank, in order to aid Ex-Im Bank in its analysis of the application for financing under these Supplemental Guidelines.

Comment [TEB21]: Clarification

~~ADOPTED BY THE BOARD OF DIRECTORS OF THE EXPORT-IMPORT BANK ON [*MONTH DAY*], 2013.~~

ATTACHMENT 3

POOREST COUNTRIES

For purposes of the Supplemental Guidelines for High Carbon Intensity Projects, Ex-Im Bank considers the "poorest countries" to be those International Development Assistance-only ("IDA-only") countries identified by the World Bank as the world's poorest countries based on (i) gross national income per capita, and (ii) in certain cases, the country's limited capacity to access credit from external sources. Ex-Im Bank will review and amend, as necessary, its list of poorest countries at the time the World Bank updates its posting of these countries. As of September 2013, Ex-Im Bank's list of poorest countries, which tracks the World Bank's IDA- only countries, numbers 62 and is set forth below:

AFGHANISTAN
BANGLADESH
BENIN
BHUTAN
BURKINA FASO
BURMA/MYANMAR
BURUNDI
CAMBODIA
CAMEROON
CENTRAL AFRICAN REP
CHAD
COMOROS
CONGO
CONGO (D.R.)
COTE D'IVOIRE
DJIBOUTI
ERITREA
ETHIOPIA
GAMBIA
GHANA
GUINEA
GUINEA-BISSAU
GUYANA
HAITI
HONDURAS
KENYA
KIRIBATI
KOSOVO
KYRGYZSTAN
LAOS
LESOTHO
LIBERIA
MADAGASCAR
MALAWI
MALDIVES
MALI
MARSHALL ISLANDS
MAURITANIA
MICRONESIA
MOZAMBIQUE
NEPAL
NICARAGUA
NIGER
NIGERIA
RWANDA
SAMOA
SAO TOME/PRINCIPE
SENEGAL
SIERRA LEONE
SOLOMON ISLANDS
SOMALIA
SOUTH SUDAN
SUDAN
TAJIKISTAN
TANZANIA
TOGO
TONGA
TUVALU
UGANDA
VANUATU
YEMEN
ZAMBIA

ATTACHMENT 3 (continued)
World's Poorest Countries with Ex-Im Bank Country limitation Schedule

Poorest Countries	Ex-Im Open for Long Term Cover (>7 years)*
AFGHANISTAN	
BANGLADESH	**open public and private**
BENIN	**open LT public**
BHUTAN	**open public and private**
BURKINA FASO	**open LT private**
BURMA/MYANMAR	
BURUNDI	
CAMBODIA	
CAMEROON	**open public and private**
CENTRAL AFRICAN REP	
CHAD	
COMOROS	
CONGO	
CONGO (D.R.)	
COTE D'IVOIRE	
DJIBOUTI	
ERITREA	
ETHIOPIA	
GAMBIA	
GHANA	**open public and private**
GUINEA	
GUINEA-BISSAU	
GUYANA	
HAITI	
HONDURAS	**open public and private**
KENYA	**open public and private**
KIRIBATI	**open public and private**
KOSOVO	
KYRGYZSTAN	
LAOS	
LESOTHO	**open public and private**
LIBERIA	
MADAGASCAR	
MALAWI	**open LT private**
MALDIVES	

IDA Only Countries (64)	Ex-Im Open for Long Term Cover (>7 years)*
MALI	
MARSHALL ISLANDS	**open public and private**
MAURITANIA	
MICRONESIA	**open public and private**
MOZAMBIQUE	**open public and private**
NEPAL	
NICARAGUA	
NIGER	
NIGERIA	**open public and private**
RWANDA	**open public and private**
SAMOA	**open public and private**
SAO TOME/PRINCIPE	
SENEGAL	**open public and private**
SIERRA LEONE	
SOLOMON ISLANDS	**open public and private**
SOMALIA	
SOUTH SUDAN	[not on CLS]
SUDAN	
TAJIKISTAN	
TANZANIA	**open public and private**
TOGO	
TONGA	**open public and private**
TUVALU	**open public and private**
UGANDA	**open public and private**
VANUATU	**open public and private**
YEMEN	
ZAMBIA	**open public and private**

*CLS as updated August 30, 2013
*IDA-only list from Annex D of the World Bank Operational Manual Operational Policies, 3.10, updated September 2013

Attachment 4

President Obama's Plan to Cut Carbon Pollution

Taking Action for Our Kids

We have a moral obligation to leave our children a planet that's not polluted or damaged, and by taking an all- of-the-above approach to develop homegrown energy and steady, responsible steps to cut carbon pollution, we can protect our kids' health and begin to slow the effects of climate change so we leave a cleaner, more stable environment for future generations. Building on efforts underway in states and communities across the country, the President's plan cuts carbon pollution that causes climate change and threatens public health. Today, we have limits in place for arsenic, mercury and lead, but we let power plants release as much carbon pollution as they want – pollution that is contributing to higher rates of asthma attacks and more frequent and severe floods and heat waves.

Cutting carbon pollution will help keep our air and water clean and protect our kids. The President's plan will also spark innovation across a wide variety of energy technologies, resulting in cleaner forms of American- made energy and cutting our dependence on foreign oil. Combined with the President's other actions to increase the efficiency of our cars and household appliances, the President's plan will help American families cut energy waste, lowering their gas and utility bills. In addition, the plan steps up our global efforts to lead on climate change and invests to strengthen our roads, bridges, and shorelines so we can better protect people's homes, businesses, and way of life from severe weather.

While no single step can reverse the effects of climate change, we have a moral obligation to act on behalf of future generations. Climate change represents one of the major challenges of the 21st century, but as a nation of innovators, we can and will meet this challenge in a way that advances our economy, our environment, and public health all at the same time. That is why the President's comprehensive plan takes action to:

* * * *

- **Lead International Efforts to Address Global Climate Change.** Just as no country is immune from the impacts of climate change, no country can meet this challenge alone. That is why it is imperative for the United States to couple action at home with leadership internationally. America must help forge a truly global solution to this global challenge by galvanizing international action to significantly reduce emissions, prepare for climate impacts, and drive progress through the international negotiations. For example, the plan:

    - Commits to expand major new and existing international initiatives, including bilateral initiatives with China, India, and other major emitting countries;

    - Leads global sector public financing towards cleaner energy by calling for the end of U.S. government support for public financing of new coal-fired powers plants overseas, except for the most efficient coal technology available in the world's poorest countries, or facilities deploying carbon capture and sequestration technologies; and

    - Strengthens global resilience to climate change by expanding government and local community planning and response capacities.

The see the full text of the Climate Action Plan, click on link below:
http://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf

Attachment 5

June 25, 2013

Statement from Fred P. Hochberg, president, Export-Import Bank of the United States

"From water treatment plants to renewable energy, the Export-Import Bank is committed to financing projects that support U.S. exports, create jobs and ensure good stewardship of our environment.

"As president of the Ex-Im Bank, I am committed to working with the Bank's board of directors to implement President Obama's new initiative to reduce greenhouse gas emissions, including his call to end public financing for most new coal-fired power plants overseas.

"Ex-Im Bank takes seriously its responsibility to carefully balance protection of the environment with the need to support the export-related jobs of American workers. I believe America can lead the way in exporting clean energy technologies that will increase jobs in our communities while reducing carbon pollution. I look forward to working with our board and all involved stakeholders to implement this policy in the best possible way."

Here's some information to provide some context:

Timeline of Actions: Ex-Im Bank and the Environment

1992 -- Ex-Im Bank began to officially address the potential environmental effects of projects it financed in 1992 in response to a Congressional mandate.

1995 -- Ex-Im Bank became the first official Export Credit Agency (ECA) to adopt a set of Environmental Procedures and Guidelines (EPG). Over the following years, Ex-Im has worked with stakeholders to ensure that the EPG is implemented in a way that balances the environmental stewardship that Congress sought with Ex-Im's mission of fostering U.S. exports. In addition, Ex-Im Bank operates in compliance with the OECD "Common Approaches on the Environment" establishing an environmental review framework that is shared among all of the OECD ECAs.

1999 -- Ex-Im Bank became the first ECA to report greenhouse gas emissions, expressed as carbon dioxide or equivalent (CO_2), associated with projects receiving its financing support. Since that time, the Bank has worked consistently to encourage multilateral development banks, export credit agencies and other international lending institutions to calculate and report publically the CO_2 emissions associated with the projects they finance. So far, Ex-Im remains the only export credit agency publically disclosing the amount of greenhouse gas emissions projected to be produced by the projects that it finances. The projections are posted on the Bank's website.

2009 -- Ex-Im Bank became the first ECA to adopt a Carbon Policy to address the climate change issues raised by the Bank's export financing activities while remaining flexible and responsive to the needs of U.S. exporters.

2011 -- Ex-Im joined more than 70 financial institutions and ECAs in adopting the Equator Principles, a globally recognized benchmark for financial institutions to determine, assess and manage the social and environmental risks of international project financing. See below for Ex-Im Bank's Equator Principles reporting.

June 2013 -- To align Ex-Im Bank's Environmental Procedures and Guidelines with the latest requirements of the OECD's Common Approaches and those set out in the Equator Principles, Ex-Im Bank's board plans to meet on June 27 to consider revisions and updates to the EPG by the end of June. [Note: *This meeting was scheduled prior to President Obama's Georgetown speech on June 25.*]

In the near future, Ex-Im's board of directors will meet to discuss how to implement President Obama's initiative to reduce greenhouse gas emissions, including his call to end public support for most new coal-fired power plants overseas.

Media contact: Dan Reilly or Phil Cogan at Ex-Im Bank: (202) 565-3200

Attachment 6

GENERAL HIGH LEVEL COMMENTS FROM ENVIORNMENTAL NGO MEETING

Participants

Sierra Club, Center for Environmental Law, Center for Biological Diversity, Earth Justice, Center for Clean Air Policy, Pacific Environment, State, Oil Change International, USTDA, OPIC, National Resource Defense Council, CEQ

Comments

- There should be more proactive engagement and promotion on these issues from high level political appointees at Ex-Im Bank, particularly in the international arena.
- Application of guidelines should be rigorous and consistent with other USG Agencies.
- The new guidelines do not include references or does not appear to explicitly take into consideration the social costs of carbon emissions, i.e., the impacts on health and agriculture. This appears to be a deletion from prior policy.
- The guidelines should include similar restrictions on coal mining and the export of coal as it would seem illogical to not support coal plants mines on principle but actively support the inputs that facilitate the operation of such plants.
- We should formally lengthen the public notice and comment period for these types of projects. The "Pelosi Amendment" requires [120/60] days for multilateral development bank projects. Ex-Im Bank should provide at least the equivalent.
- The guidelines should provide more firm criteria for analyzing and/or provide baseline thresholds for making determinations on "economically feasible alternative" criterion.
- The guidelines should provide more firm criteria for analyzing and/or provide baseline thresholds for making determinations on "most efficient technology available" criterion.
- POTUS Climate Action Plan includes reference to stop fossil fuel subsidies- Ex-Im Bank should me more proactive in that area.
- There appears to be a difference between our standard of "Best Available Technology" and Treasury's "Best Internationally Available Technology" – the latter should be adopted by Ex-Im; "BAT" carries baggage and is dangerous to use.
- Local conditions should not be a determining factor since foreign consultants can be brought in to operate/oversee even very highly technically sophisticated plants.
- Clarify differences between economically feasible (e.g., includes cost of externalities) and financially feasible – our draft appears to confuse the two.
- Suspicious of intent behind eliminating early due diligence review for high carbon intensity projects.
- Additional transparency --the Bank should provide the analysis of how a particular project was deemed in compliance with the requirements (e.g., internal due diligence analysis), and that should be available for public review before the Board's decision.

GENERAL HIGH LEVEL COMMENTS FROM EXPORTERS

Participants

- **Coal Utilization Research Counsel, Coalition for Employment Through Exports, Caterpillar, Association of Equipment Manufacturers, National Association of Manufacturers, CEQ, OPIC, GE, State, USTDA, U.S. National Mining Association, Joy Global.**

Comments

- The Ex-Im Bank policy will not reduce C02 emissions – It will increase C02 emissions globally by prohibiting export of advanced US technology to markets expected to have greatest growth in number of coal fired plants.
- Bank should emphasize and encourage renewables without abandoning a critical energy source.
- The policy will destroy business incentives to continue to develop cleaner coal technologies.
- The policy will result in the loss of thousands of U.S. jobs.
- The Bank should prohibit support to coal plants, period rather than have thresholds and criteria for acceptable use as this may cause confusion in the market place.
- The Bank should consider providing a waiver if the U.S. can offer a cleaner technology in a completive bid situation - This will have the dual result of supporting exports and reducing carbon emissions.
- Treasury and Ex-Im Bank policies should be harmonized.
- The Policy should not "carve out" IDA Blend countries – IDA is IDA, IDA blend is a superficial distinction rather than a true sub-category of countries and pulling out certain countries is contrary to the POTUS exception for the "poorest" countries.
- Ex-Im Bank should consider a de minmis threshold size. IFC is 50 MW before policy is triggered.
- Ex-Im Bank should consider implications of 650 threshold for non-coal plants. The number is not the bright line it used to be and may have some unintentional consequences.
- The Policy in general should not address anything other than coal as the POTUS statement only mentioned coal
- Requiring CCS may make the cost of electricity not viable.
- CCS "ready" is more viable then CCS "deployed".
- Clarify that 650 threshold and 500 threshold are for a plant running at base level.
- Clarify requirements for the alternatives analysis
- Policy should more explicitly state implications for coal mines. Nonetheless, while there is no direct impact on coal mines there will definitely be an indirect impact.
- Clarify that Ex-Im Bank will support Coal Exports.
- Policy should be phased in focusing on improvements in energy mix through retrofits and positive incentives, not negative prohibitions.

Attachment 7 - Copies of the written comments on the Draft Revision submitted to Ex-Im Bank

CATERPILLAR®

Caterpillar Inc.

1425 K Street N.W., Suite 400
Washington, D.C. 20005

November 8, 2013

Mr. James A. Mahoney
Vice President
Engineering & Environment Division
Export-Import Bank of the United States
811 Vermont Avenue, N.W.
Washington, DC 20571

Re: Proposed Revisions to Supplemental Guidelines for High Carbon Intensity Projects

Dear Mr. Mahoney,

Caterpillar Inc. is submitting these comments on the *Proposed Revisions to the Supplemental Guidelines for High Carbon Intensity Projects* issued for review and comment by the Export-Import Bank of the United States (Bank) on September 30, 2013 (Draft Supplemental Guidelines). Caterpillar appreciates the efforts you and your staff have made to discuss the Draft Supplemental Guidelines with stakeholders and to consider their comments. Consistent with your request during the public meeting on October 30, 2013 at the Bank, Caterpillar is submitting these written comments for your consideration.

Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines, and diesel-electric locomotives. Many of our customers seek financing from the Bank through the support of Caterpillar Financial Services. For some projects, financing through an export credit agency is a necessary component for U.S. companies to compete for the sale of relevant products or services. As a result, it is critical that any guidelines adopted by the Bank allow U.S. exporters to remain fully competitive in the global marketplace for the financing of exports. The Bank's June 2013 Supplemental Guidelines achieve this objective while imposing substantive requirements to reduce carbon emissions from high carbon intensity projects.

As explained below, Caterpillar believes this balance is set aside in the Draft Supplemental Guidelines. This imbalance will result in negative environmental and economic impacts. The Draft Supplemental Guidelines also put U.S. exporters at a significant competitive disadvantage vis-à-vis their global competitors. Caterpillar suggests specific changes that will maintain this balance. Finally, Caterpillar suggests a few clarifications are necessary if the Draft Supplemental Guidelines are finalized. If adopted, Caterpillar believes its comments and suggestions will allow the Bank to continue its important work of promoting U.S. jobs through exports.

1. The Draft Supplemental Guidelines Will Increase Carbon Emissions, Cede Ground to International Competitors, and Negatively Impact U.S. Jobs

The Bank should consider abandoning or suspending implementation of the Draft Supplemental Guidelines because they will result in several unintended consequences. First, unless other major Export Credit Agencies (ECAs) were to adopt similar conditions of financing, the Draft Supplemental Guidelines will not result in any appreciable reduction of carbon emissions. Poor and emerging economies are using coal because it is a low cost resource, and the infrastructure and generation systems are well known and inexpensive to reproduce. As these countries attempt to emerge from energy poverty and electrify their economies, financial decisions to build that generation system will continue to focus on the lowest cost generation options, which in many countries is coal.

As a result, high carbon intensity projects will go forward without U.S. exports. According to the International Energy Agency (IEA), worldwide coal fired power generation will increase under a conservative scenario by 48% by 2035.[1] Without U.S. technology available to compete for these projects, these projects will proceed with less efficient technology from foreign producers. Instead of reducing carbon emissions consistent with the desired effect of the President's Climate Action Plan, the Draft Supplemental Guidelines will likely result in an increase in carbon emissions.

The loss of U.S. jobs is the second negative consequence of the Draft Supplemental Guidelines. Currently, U.S. exporters are well positioned to compete with foreign competitors for high carbon intensity projects involving ECA financing because of the Common Approaches. If demand increases as projected by the IEA, it will create a significant economic opportunity for U.S. technology and equipment exports if U.S. exporters are supported by competitive financing. If the Bank adopts the Draft Supplemental Guidelines as proposed, U.S. exporters will lose this market opportunity. Nonetheless, these projects will move forward without U.S. exports or Bank financing. As a result, U.S. manufacturers will be forced to cede ground to international competitors, which will undoubtedly have a negative impact on U.S. jobs.

Lastly, the Draft Supplemental Guidelines could negatively impact and delay investment in and development of carbon capture and sequestration (CCS) technologies. Caterpillar defers to the comments submitted by the Coal Utilization Research Council for further explanation on the impacts to CCS technology development.

2. The Draft Supplemental Guidelines Must Ensure that Conditions of Financing Are Fully Competitive with other Government-Supported Financing

Caterpillar believes the current guidelines for high carbon intensity projects allow the Bank to meet its ambitious environmental goals while fostering the expansion of U.S. exports in a manner consistent with the Bank's objectives in 12 U.S.C. § 635(b)(1)(A). The Draft Supplemental Guidelines change that balanced approach to the detriment of U.S. exporters (and, as explained above, to the detriment of the environment).

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[1] International Energy Agency Coal Industry Advisory Board, *The Global Value of Coal*, 15-16 (2012), available at http://www.iea.org/publications/insights/insightpublications/global_value_of_coal.pdf (visited November 8, 2013).

The Bank adopted the current version of the Supplemental Guidelines for High Carbon Intensity Projects in June 2013 (June 2013 Supplemental Guidelines), but only after a lengthy and deliberate process to secure an agreement among the other major ECA for a consistent approach to environmental conditions of financing, known as the "Common Approaches."[2] This sequence was critical to maintaining a competitive environment for U.S. exports related to high carbon intensity projects while also setting rigorous standards for reducing carbon emissions from such facilities. Indeed, the primary objectives of the Common Approaches include achieving "equivalence among the measures taken by the Members," "reducing the potential for trade distortion," and promoting "a global level playing field for officially supported export credits." They allow the Bank to "take into account the potential beneficial and adverse environmental effects" of projects proposed for funding in a manner that is "consistent with the objectives of Section 635(b)(1)(A)." That is, the Common Approaches allow for "fully competitive" finance conditions. See 12 U.S.C. §§ 635i-5(a)(1), 635(b)(1)(A).

In contrast to the level playing field established through the Common Approaches and adopted by the Bank in the June 2013 Supplemental Guidelines, the Draft Supplemental Guidelines will remove U.S. exporters from the competition for important infrastructure projects.
Caterpillar recommends that the Bank consider suspending any changes to the June 2013 Supplemental Guidelines until it secures an amendment to the agreement for the Common Approaches consistent with the Draft Supplemental Guidelines. Until such an agreement is in place, the substantive limitations imposed on U.S. exports through the Draft Supplemental Guidelines will put U.S. exporters at a significant competitive disadvantage for high carbon intensity projects requiring public financing.

In the alternative, if the Bank is not able to suspend implementation of the Draft Supplemental Guidelines, Caterpillar recommends that the Bank add flexibility to the guidelines until all the major ECAs adopt similar conditions to financing. For example, the Bank could provide for a waiver where the U.S. technology is superior (i.e., results in lower carbon emissions) to the foreign competition. If a waiver is granted, the project would be held to the June 2013 Supplemental Guidelines. This approach would maintain a level playing field, encourage technological advancements in the U.S., promote U.S. jobs, and meet the Bank's and the President's objective of reducing carbon emissions.

3. The Bank Should Expand the List of the World's Poorest Countries

The Draft Supplemental Guidelines include an exemption to allow financing of high carbon intensity plants in the world's poorest countries, subject to certain conditions. See Draft Supplemental Guidelines at § II. The Draft Supplemental Guidelines propose to use the World Bank's International Development Association (IDA) list of the world's poorest countries, excluding "IDA-blend countries." Instead of relying on the World Bank to define the world's poorest countries, Caterpillar suggests that the Bank use the List of Developing Countries from the United States Agency for International Development (US AID).[3] The US

[2] See *Recommendation of the Council on Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence*, available at http://www.oecd.org/tad/xcred/commonapproaches.htm (visited November 8, 2013).
[3] See http://www.usaid.gov/sites/default/files/documents/1876/310maa.pdf (visited Nov. 8, 2013).

AID List of Developing Countries is based on the World Bank's full IDA list, but includes all developing countries eligible for aid under the U.S. Foreign Assistance Act.

Caterpillar recommends that the Bank, as an agency of the United States, utilize the US AID List of Developing Countries as the poorest countries eligible for the exemption under the Draft Supplement Guidelines.

4. Issues for Clarification

In addition to the comments above, Caterpillar requests that the Bank consider three clarifications to the Draft Supplemental Guidelines. These clarifications relate to the definition of integrated mine-mouth coal power plants, the continuation of the 50 MWe exemption from the June 2013 Supplemental Guidelines, and limiting the application of the policy to coal plants.

First, Caterpillar believes the present description of an integrated mine-mouth coal power plant requires additional clarification. During the October 30, 2013 public meeting, the Bank staff made clear that the Draft Supplemental Guidelines do not apply to projects for the export of mining products or services except where the project is for a new fully integrated mine-mouth coal power plant in which the mine and the power plant are proposed together as a fully integrated project by the same owner. In all other circumstances involving mining products or services, the Draft Supplemental Guidelines would not apply. In general, the Bank explained that projects for mine extraction, to which the guidelines do not apply, are distinguished from integrated mine-mouth projects because their economic justification is based on tons of coal extracted rather than energy produced.

As drafted, the guidelines could be interpreted more broadly than the Bank intends. The Bank should clarify that the guidelines do not apply to exports of goods or services to (1) support only the mine extraction portion of any existing integrated mine-mouth coal power plant; or (2) to support new or existing mine extraction operations that are a separate legal entity from any coal power plant supplied from the mine.

Second, in the June 2013 Supplemental Guidelines, the Bank established an applicability threshold of 50 MWe. Projects with a net capacity of 50 MWe or less were excluded from the guidelines. Caterpillar is concerned that the removal of this exemption could result in unintended consequences, subjecting projects to the Draft Supplemental Guidelines that would otherwise be clearly out of scope. For example, electric power generation equipment with a capacity of 50 MWe (net) or less is often the first power source to rural communities in developing countries. As a result, Caterpillar recommends that the Bank include this exemption in the final supplemental guidelines.

Third, the Draft Supplemental Guidelines include a broad definition of high carbon intensity plants that could capture natural gas and distillate fuel oil plants. The scope of the limitations proposed in the President's Climate Action Plan with regard to exports is limited to coal fired power plants. As such, if the Bank finalizes the Draft Supplemental Guidelines as proposed, it should not apply them to other fossil fuels. Financing of project applications for power plants using other fossil fuels should remain subject to the framework in the June 2013 Supplemental Guidelines.

Finally, because of the significant time and resources involved in the application process for financing through the Bank, Caterpillar suggests that the Draft Supplemental Guidelines should not apply to projects already under way. If the Bank finalizes the Draft Supplemental Guidelines, Caterpillar requests that the Bank apply the June 2013 Supplemental Guidelines to any projects with a Letter of Interest from the Bank issued prior to the adoption of the revised guidelines.

Caterpillar recommends that the Bank consider revisions to the Draft Supplemental Guidelines consistent with the clarifications requested above.

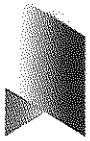
5. Summary

The Bank's June 2013 Supplemental Guidelines provide rigorous procedural and substantive environmental requirements for high carbon intensity plants while maintaining fully competitive financing conditions for U.S. exporters. Caterpillar encourages the Bank to maintain that approach in any future revisions to the guidelines.

Thank you for your consideration of these comments. If you have any questions, or wish to discuss these comments in more detail, please contact me at (202) 466-0671.

Sincerely,

Christopher Myers
Federal Government Affairs Director
Caterpillar Inc.



Coalition *for* Employment
Through Exports, Inc.

Statement of Coalition for Employment through Exports on draft Export-Import Bank Supplemental Guidelines for High Carbon Intensity Projects

The Coalition for Employment through Exports (CEE) appreciates the opportunity to provide comments to the Export-Import Bank of the United States (Ex-Im Bank) on the draft Supplemental Environmental Guidelines for High Carbon Intensity Projects. CEE is an association of exporters, banks, insurers and other private companies that support proactive and effective trade finance and trade promotion policies of the U.S. government.

Both CEE and its member companies support the President's Climate Action Plan, but believe that the President's proposal to deny Ex-Im Bank financing to U.S. exports supporting coal-fired generation, contained in his speech introducing the Action Plan, the relevant portions of which are set out below, is fundamentally flawed, and if implemented, will result in thousands of lost American jobs while actually aggravating the carbon emission consequences of the current trends projected in power generation globally by the International Energy Agency.

A. The President's June 25 speech articulated not a single initiative but rather a two pronged strategy for reducing carbon emissions in the Emerging Markets - that (1) the Administration will undertake an initiative to support and promote the use of natural gas into the Emerging Markets while (2) simultaneously eliminating Ex-Im Bank financing for coal fired power generation:

> "Developing nations with some of the fastest-rising levels of carbon pollution are going to have to take action to meet this challenge alongside us. They're watching what we do, but we've got to make sure that they're stepping up to the plate as well. We compete for business with them, but we also share a planet. And we have to all shoulder the responsibility for keeping the planet habitable, or we're going to suffer the consequences -- together.
> "So to help more countries transitioning to cleaner sources of energy and to help them do it faster, we're going to partner with our private sector to apply private sector technological know-how in countries that transition to natural gas. We've mobilized billions of dollars in private capital for clean energy projects around the world.
>
> "Today, I'm calling for an end of public financing for new coal plants overseas unless they deploy carbon-capture technologies, or there's no other viable way for the poorest countries to generate electricity. And I urge other countries to join this effort."

We are deeply concerned that while Ex-Im Bank is moving forward to consider revised environmental guidelines implementing the second element of the President's proposal, there is no evidence of an initiative to support natural gas fired power generation, and certainly no discussion of an initiative of the magnitude needed to represent a meaningful alternative to coal fired power generation. We believe

that the two components of the President's initiative must be meaningful and be implemented simultaneously if the initiative is to make any sense whatsoever.

Accordingly, we strongly urge the Ex-Im Bank that its implementation of the draft regulations be suspended until there exists a relevant counterpart initiative, meaningful in size and scope, supporting gas fired power generation. A failure to implement both elements simultaneously will actually worsen carbon emissions levels in the Emerging Markets by making U.S. technologies financially uncompetitive, and force these countries to rely on Chinese and other inferior technologies for coal fired generation. Further, this flawed strategy will stifle continued environmental improvements in the U.S. technologies and cause the loss of tens of thousands of American jobs.

B. The Administration's Climate Change Action Plan promotes natural gas and cleaner U.S. technologies domestically, but its proposed policy constraining Ex-Im Bank financing ignores electricity demand in the Emerging Markets and the underlying economic fundamentals that encourage recourse to coal-fired power generation.

U.S. companies are global leaders in cleaner extractive energy technologies. U.S. natural gas and coal fired power generation technologies remain far cleaner than foreign competitors. Placing a restriction on U.S. exports through a carbon intensity limit would only benefit foreign companies who possess higher polluting technologies. These higher carbon emitting energy companies will gain a competitive advantage over U.S. companies throughout Africa and across the world if the Export-Import Bank approves the proposed environmental guidelines for high carbon intensity projects. Without the proposed Bank carbon limit, U.S. energy technology exports would continue to contribute to lower carbon emissions globally and U.S. jobs at home.

According to the U.S. Energy Information Administration, the use of natural gas in the energy supply in the United States has led to a 6.5 percent drop in carbon dioxide emissions in 2012 (carbon dioxide per GDP). "This is the largest drop in the overall carbon intensity of the economy since records were kept beginning in 1949. Only two other years, 1952 and 1981 had declines greater than 5 percent." [1]

President Obama's Climate Action Plan recognizes the role of natural gas in lowering carbon emission in the atmosphere. Here are two key excerpts from the President's Climate Action Plan:

> "In fact, last year, carbon emissions from the energy sector fell to the lowest level in two decades. In 2012, America's net oil imports fell to the lowest level in 20 years and we have become the world's leading producer of natural gas – the cleanest-burning fossil fuel."[2]

[1] http://www.eia.gov/environment/emissions/carbon/?src=home-b2
[2] http://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf

Coalition *for* Employment
Through Exports, Inc.

The OECD, the Energy Information Administration within the Department of Commerce (EIA) and the International Energy Agency (IEA) have each forecast that coal fired power generation will continue to increase until 2035-2040, and that during this period approximately 1,000 GW of coal capacity is projected to be built at a cost of approximately US $2.5 trillion.[3] A World Resources Institute study lists 1,200 coal fired plants, with a total installed capacity of 1,400 GW of coal fired plants currently in planning or development. [4]

A prominent U.S. EPC contractor estimated that during the 2010-40 time period, approximately $300 billion in U.S. technology and equipment exports related to the new coal fired power generation could likely come from the U.S., [5] if U.S. companies had competitive financing.

Why such dependence on coal? Because the fuel supply is abundant, the price is stable long term and more competitive than any alternative, and little infrastructure is required in comparison to any alternative fuel, especially gas. Those are the economic reasons.

But the domestic public policy reasons are even more fundamental - power demand is increasing in the Emerging Markets (EM) at such a fast pace that coal is considered in most EM countries to be the only fuel that might enable them to keep up with demand growth. In many of these countries, power shortages are the greatest constraint to economic growth. Governments are also responding to the demands of a growing middle class that seeks the benefits of reliable access to ample power. These countries will respond to a new U.S. policy denying Ex-Im Bank support simply by substituting financing from other export credit agencies.

While much of this new coal fired generation capacity will be built in non-OECD countries where electricity demand continues to grow at a faster pace than OECD countries, growth in coal fired power generation continues also in developed countries. According to the World Resources Institute Working Paper, Japan has plans to build four coal fired plants, Germany ten plants, Italy four, the UK has one

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[3] The project number was derived using projections from the *OECD/IEA World Energy Outlook 2012* for estimated growth in coal-fired generation capacity and the value of the plants was calculated using *Updated Capital Cost Estimates for Utility Scale. Electricity Generating Plants* published by the U.S. Energy Information Agency.

[4] World Resources Institute, Global Coal Risk Assessment, Working Paper, November 2012

[5] 835 new facilities, each with 1300 MW capacity, will be needed to satisfy the 1085 GW of new coal generation. Of the 835, we assume 75% will be advanced pulverized coal and 25% will be APC with Carbon Capture and Storage. Using the EIA capital cost estimates with adjustments for non-US markets, the total capital costs of the plants will exceed US$2.5 trillion. Much of the capital costs for coal generation facilities are local labor. Many of the new facilities will be built in markets (China and India) where U.S. companies may provide specialized equipment, technology, and project management but are unlikely to provide a majority of the content. Thus, the U.S. content is a small percentage of the total value of the expected plants. Nevertheless, the total value is so large that the U.S. content potential still represents a US$300 billion opportunity.

under construction, the Netherlands three, and even Greece has three such plants in the planning stage. It will be difficult for these countries to support the Administration's proposal when they are actively engaged in expanding their own coal fired power generation.

The following details several regional and national situations that underscore the pressures which are driving countries around the world toward coal fired power generation[6]:

South East Asia

The International Energy Agency recently issued a report on coal fired generation in Southeast Asia that concluded the region would become significantly more dependent on coal fired power generation over the next 20+ years, doubling coal fired capacity between 2011 and 2020 and again between 2020 and 2035. The 10 ASEAN states are currently planning on more than $175 billion in new coal fired plants before 2035 to meet demand as coal's share of generation is projected to expand from 31% to 49% by 2035.

As examples, Vietnam has announced plans for 90 new coal fired plants by 2025, with a combined capacity of 106,000 MW to support an economy projected to grow at 7.5 to 8% a year for the next five years.

For Indonesia, increased power generation is not only an economic but a development issue. In 2011, only about 70% of its population had access to power. With abundant domestic coal reserves, Indonesia is anticipating demand growth of 9% over the next half decade as it seeks to respond to strong economic growth, a burgeoning middle class and a commitment to extend the benefits of power to a larger portion of the population. Indonesia's total gross electricity generation capacity additions, about half or 50 GW, will be coal fired according to projections by the IEA.

An important point to note is that the IEA is projecting that the newer coal fired plants in Indonesia and elsewhere will increasingly utilize supercritical and ultra supercritical technologies which are more efficient than subcritical and produce lower carbon missions. This trend should favor U.S technologies that are extremely competitive in these high efficiency coal fired generation technologies.

China

According to the EIA, in 2010 the coal share of China's total electricity generation was an estimated 77%, decreasing only to 63% in 2040. During this period, China's share of world coal fired generation capacity is expected to grow from 40% to 50% of the world total. Its electricity demand is anticipated to grow by 3.7% per year from 2010 to 2040, requiring a coal fired capacity expansion of almost 530 GW during this

[6] This data was drawn principally from the following documents: U.S. Energy Information Administration, International Energy Outlook 2013, Reports on Electricity and Coal (2013), OECD/IEA, World Energy Outlook 2012, EIA Southeast Asia Energy Outlook – World Energy Outlook Special Report (September, 2013)

period for an average increase of nearly 18 GWs per year. China is undertaking efforts to increase the efficiencies of its coal fired generation by shutting down older, less efficient plants (and selling at least some of them into Sub Saharan Africa) as well as moving towards more efficient technologies.

India

According to the EIA, in 2010 the coal share of India's electricity generation was 68%, and is projected to grow by 3.1% per year to 2040, resulting in an expected increase of approximately 170% in coal fired electricity generation over the 2010 base by 2040. According to an IEA evaluation of the Indian Power Sector, "Power outages and unreliability of electrical supply restrict the country's overall economic development. " Shortages in electricity supply were 10.1% in 2010 and in peak capacity more than 15 GW. Actual capacity additions in the last three five year plans have been only half of what has been targeted. Average cost of electricity sold only covers a portion of the average production costs ($10 billion in 2008 alone), which discourages private investment in the sector.

Sub Saharan Africa

At present less than 30% of the 800 million people in Sub Saharan Africa have access to reliable power. For them this is fundamentally a development issue. There are 51 cities that have over a million people, so the development of power grids are an essential element to providing that widespread access. In 2011 the generation capacity of Sub-Saharan Africa was approximately 68 GW, two thirds of which is in South Africa whose generation mix is about 90% coal fired generation. Major new coal fired plants are under construction in South Africa and the Congo and the Chinese are now selling some of their old coal generation plants into Kenya and elsewhere, as well as providing financing for many other coal fired plants throughout the region. Nigeria just announced that it would be using its "vast" coal reserves to address the problem of its "persistent epileptic power supply."[7]

Hydropower, gas fired generation and renewable energy all represents major opportunities in the region but each also suffer from disadvantages that drive countries back towards coal fired generation. There are major opportunities for hydropower but because it is highly seasonal, droughts have discouraged countries from becoming too reliant on this energy source. Gas fired generation requires significant and costly infrastructure that needs to be supported from external sources, like Europe and the U.S. As for renewables, the IEA estimates that the total integration costs of increasing the supply of intermittent renewables to be $5 to $25 per MW. So coal will remain a major component in any fuel mix as Sub Saharan Africa strives to improve electricity access. The situation is dire and worsening, as the IEA projects that the number of people in Africa without access to electricity will actually increase by about 50 million people between now and 2025 or 2030 before the number of those without electricity begins to shrink.

[7] Allafrica.com:Nigeria:Coal can power Electricity for the next 30 years 11/6/2013

C. U.S. Companies are world leaders in supercritical and ultra supercritical coal fired generation technologies. A Presidential policy that deprives the global market of U.S. technology will worsen the environmental impact of coal fired power generation globally and destroy tens of thousands of American jobs.

The President's pronouncement is fundamentally counterproductive to the Administration's stated objective unless the Administration can mobilize such financial support for gas fired power generation that it can replace a meaningful number of the coal fired facilities now planned for development. Given that third parties are estimating that trillions of dollars will be needed even for coal fired generation, we do not believe that such funding can be mobilized in either the magnitude or timeframe to be particularly relevant in replacing the coal fired generation already planned.

By including U.S. super critical and ultra supercritical coal fired technologies in the Bank prohibition, the policy will deprive the global market of the benefits of advanced U.S. technologies that will best ameliorate the carbon emissions that flow from these projects.

It will also destroy any incentive by business to continue to develop even better technologies that further reduce carbon emissions while utilizing the most available fuel source for power generation. 25 years is a long time – much can be done to improve the generation technologies but only if U.S. companies can continue to obtain competitive financing with which to sell their technology overseas.

A far preferable approach would be precisely the reverse of the President's articulated policy – a massive effort to push countries toward gas fired generation, including major financial support, while also aggressively promoting U.S. supercritical and ultra supercritical technologies abroad, consistent with the President's National Export Initiative, so successfully promoted by the Administration.

The result of the announced policy will be the loss of thousands of US jobs as the Bank, by denying financing, closes off a market in which U.S. companies have the best available technology. We believe that the Bank, while emphasizing renewable energy, must not abandon the rest of the energy spectrum. There MUST be retained an incentive structure to support and promote supercritical and ultra supercritical technologies and encourage further technological enhancement.

D. The exclusion of "poorest countries" from the President's pronouncement as defined by Ex-Im Bank in its draft language in too narrow a fashion, leaving few countries where the Bank is willing to do business. The Bank should apply the exclusion to all IDA countries as defined by the World Bank since inclusion on that list has as its sole measure a country's poverty level.

The President' statement provides that Ex-Im Bank should continue to support coal-fired power generation in the poorest countries. The World Bank, through its International Development Association (IDA) designation, has identified the poorest countries that lack access to international financing in support of their development goals and in need of highly concessional financing terms and conditions,

provided under the specialized IDA structure. According to the World Bank the IDA's aim is "to reduce poverty by providing loans and grants for programs that boost economic growth, reduce inequalities, and improve people's living conditions ". To be eligible for support from the IDA, countries are assessed by their poverty and their lack of creditworthiness for commercial borrowing. As of 2012, IDA determined that in order to qualify for IDA's concessional lending a country's per capita income cannot exceed $1,175 (in 2010 dollars). Therefore countries that meet that requirement are deemed the "poorest countries" by IDA and the World Bank.

Ex-Im Bank's exclusion of IDA-blend countries is mistaken and leaves the Bank open to the charge that it is picking winners and losers. The World Bank Board has established the IDA list of countries as a register of the poorest countries and therefore all IDA countries should qualify under the exception.

E. Other Comments

The Ex-Im Bank has a mandate, articulated in its Charter, to provide fully competitive financing on behalf of U.S. companies that export so as to maximize the American jobs generated and sustained by those exports. Given the shortcomings we find in this Administration policy we hope that Ex-Im Bank will consider wholesale changes in the policy proposed by the Administration. In the absence of such major changes, we ask the Bank to consider the following changes to its draft guidelines, in addition to the acceptance of all IDA countries as falling within the President's exception:

a. Ex-Im Bank should make clear that the President's pronouncement was directed toward and should be applied only to coal fired power generation. The rest of the energy spectrum – gas, diesel and the like should remain entirely unaffected by any changes intended to implement the President's pronouncement. The President's statement was restricted to coal. So should be the Bank's response implementing that statement. The Bank should also make clear the 650 grams of CO2 per kilowatt hour applies to base load facilities.

b. Ex-Im Bank should make available a waiver in a competitive situation in which a U.S. company can provide an applicable technology that is environmentally superior to that of the foreign competition. Surely the Administration would support the sale of an environmentally more advanced U.S. technology that would result in a lower carbon impact of the generation facility to that of the foreign technology rather than not supporting U.S. technology and allowing inferior coal fired generation technologies to be constructed around the world.

c. Ex-Im Bank should grandfather in projects, which had obtained Bank Letters of Interest. Given the lack of advance notice there are multiple projects that were in development with the expectation that they would be eligible for Ex-Im Bank financing. It would be appropriate for the Bank to grandfather these projects in.

d. In considering a project located in a "poor country," the definition of an "economically feasible alternative" is undefined and amorphous. The Bank should set out a process by which this issue can be addressed early in the application process and provide greater clarity regarding the Bank's to this issue.

From: Stephen Parsons
Sent: Tuesday, November 12, 2013 3:39 PM
To: 'Eng, Esther'
Cc: Greczmiel, Horst; James Mahoney; Tracey Braun; Isabel Galdiz; K Koro Nuri; Nicole Hutsell; Angela Freyre
Subject: RE: Request for Extention to Comment on Supplemental Guidelines for High Carbon Intensity Projects
Attachments: Final EP&G Approved.6_27_2013 Full.pdf

Hi Esther,

Thank you for sending your comments to us today. We know it was difficult to fit this in with your busy workload appreciate taking the time.

With respect to your comment, the following language on the NEPA process is found in Section I, paragraph 18. of the Environmental and Social Due Diligence Procedures and Guidelines (page 5 of the full document, attached):

> "For those projects that may significantly affect the quality of the human environment of the U.S., its territories or possessions, or Antarctica, Ex-Im Bank will require adherence to the National Environmental Policy Act (NEPA) environmental review procedures, as stipulated in 12 CFR, Chapter IV, Part 408. For certain CO2 emitting Projects, Ex-Im Bank's determination of whether further NEPA analysis is required will be posted on the Pending Transactions website. For "fossil fuel projects"5, this determination will be posted for at least 30 days before Board consideration to ensure that interested parties are provided the opportunity to comment on Ex-Im Bank's NEPA determination associated with the pending transaction. For other projects, the determination will be posted prior to Board consideration. In cases where a NEPA review is determined to be necessary, the Engineering and Environment Division will conduct the NEPA review process simultaneously with the financial, legal, technical and environmental reviews of the transaction."

This part of the ESPGs is not being revised at this time; only the Annex A-2 Supplemental Guidelines are being revised.

All the best,
Steve

Stephen Parsons
Senior Environmental Protection Specialist

Engineering & Environment Division | Export-Import Bank of the U.S.
811 Vermont Avenue, N.W., Washington, DC 20571
+1-202-565-3576 (office) | +1-202-375-8911 (mobile)
Stephen.Parsons@exim.gov www.exim.gov

From: Eng, Esther [mailto:Esther_Eng@ceq.eop.gov]
Sent: Tuesday, November 12, 2013 12:46 PM
To: Stephen Parsons
Cc: Greczmiel, Horst; James Mahoney; Tracey Braun; Isabel Galdiz; K Koro Nuri; Nicole Hutsell; Angela Freyre
Subject: RE: Request for Extention to Comment on Supplemental Guidelines for High Carbon Intensity Projects

Hi Steve,

The Supplemental Guidelines Annex does not specifically mention the NEPA requirements. While it is being redrafted, please include the suggested language below. Please let us know if you have any questions.

Ex-Im Bank complies with NEPA as part of their process to make informed decisions. Ex-Im Banks's NEPA process must be completed in accordance with 40 C.F.R. § 1500-1508 (1978), 12 C.F.R. § 408 (1979), and the Environmental and Social Due Diligence Procedures and Guidelines to account for the potential beneficial and adverse environmental effects before a final decision on whether to approve the funding is made.

Thank you.

Esther Eng
Assistant to the Associate Director for NEPA Oversight
Council on Environmental Quality
202-395-4356
Esther_Eng@ceq.eop.gov

From: Stephen Parsons [mailto:stephen.parsons@exim.gov]
Sent: Friday, November 08, 2013 3:05 PM
To: Eng, Esther
Cc: Greczmiel, Horst; James Mahoney; Tracey Braun; Isabel Galdiz; K Koro Nuri; Nicole Hutsell; Angela Freyre
Subject: RE: Request for Extention to Comment on Supplemental Guidelines for High Carbon Intensity Projects

Dear Esther and Horst,

We want very much to have your comments on the draft Supplemental Guidelines Annex. Unfortunately, the schedule is tight and we need to complete the final proposed Supplemental Guidelines Annex package for submission to our Board by COB Thursday, November 14th. Are you available for a call on Tuesday after 3:00 pm to discuss your comments?

Please feel free to give me a call today at 202 375 8911 today to discuss options.

All the best,
Steve

Stephen Parsons
Senior Environmental Protection Specialist

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Stephen.Parsons@exim.gov | www.exim.gov

From: Eng, Esther <Esther_Eng@ceq.eop.gov>
Sent: Friday, November 08, 2013 10:08 AM
To: Stephen Parsons

Cc: Greczmiel, Horst
Subject: Request for Extention to Comment on Supplemental Guidelines for High Carbon Intensity Projects

Mr. Parsons,

We would like to request for an extension to the comment deadline in order to appropriately review the draft Supplemental Guidelines for High Carbon Intensity Projects. We anticipate providing comments by November 15, 2013. We appreciate your consideration on this request.

Thank you,
Esther

Esther Eng
Assistant to the Associate Director for NEPA Oversight
Council on Environmental Quality
202-395-4356
Esther_Eng@ceq.eop.gov

November 8, 2013

Mr. James A. Mahoney
Vice President
Engineering & Environment Division
Export-Import Bank of the United States
811 Vermont Ave, NW
Washington, DC 20571 ..

Re: Proposed Revisions to Supplemental Guidelines for High Carbon Intensity Projects

Dear Mr. Mahoney,

These comments are submitted by the Coal Utilization Research Council (CURC), a coalition of U.S. coal producers, equipment suppliers, electricity generators, research organizations, labor organizations and business associations. A list of CURC's membership is appended to these comments as attachment A as well as a brief description of the organization. Further information about CURC can be found at www.coal.org.

CURC focuses upon the research, development, demonstration and commercial deployment of technologies that utilize coal to produce useful forms of energy or chemical feedstocks and also technologies that prevent or capture emissions from coal use. Several CURC members are exporters of equipment, goods or services used in the planning, construction or operation of fossil fuel-based electricity generating facilities. These members utilize the credit support services of the Export-Import Bank of the United States (hereinafter referred to as U.S. Ex-Im or Bank) and this reliance upon the Bank in supporting coal projects in other countries is the basis for CURC's current interest in the proposed guidelines.

Our comments relate to the draft issued by the Bank on September 30, 2013 and identified as ANNEX A-2, SUPPLEMENTAL GUIDELINES FOR HIGH CARBON INTENSITY PROJECTS.

As a technology-oriented organization, CURC promotes the development and widespread use of technologies enabling the cost-effective and environmentally acceptable use of coal. The President's directive to provide U.S. credit support to only coal-based projects equipped with carbon capture and sequestration (CCS) technology, except in country-specific circumstances, could be an important mechanism to address climate change. And, with coal the fastest growing energy resource being used worldwide, soon to exceed oil consumption, limiting U.S. Ex-Im support in overseas coal-fueled electricity projects could provide important leadership toward addressing this global issue. This is especially true at a time when there is no international (or domestic) concensus related to the control of carbon dioxide (CO2) emissions.

At the same time, the President has also established an ambitious goal to double the volume of exports of U.S. goods and services as a means to strengthen our recovering economy.

We are concerned that both of these laudible goals – providing world leadership in addressing climate change and doubling U.S. exports – might conflict unless the reach of the proposed Supplemental Guidelines are carefully attuned to the current commercial availability of carbon capture technology.

Industry, in partnership with the Department of Energy, and others, is making rapid and significant headway to develop and demonstrate CCS technology in conjunction with the generation of electricity from coal. We have not however, progressed far enough for power plant developers to confidently rely upon the CO2 capture technologies that are only now in the demonstration phase of development. Further, to our knowledge, there are no credible equipment or service providers ready to provide acceptable commercial guarantees related to the operation of CCS equipment installed on coal-fueled electricity generation facilities. And, given the anticipated competitively bid nature of these international energy projects, a requirement that U.S. credit support be conditioned upon the installation of CCS technology simply increases costs and denies the opportunity for U.S. exporters to realistically compete for the project when other development banks do not have the same eligibililty requirement.

The proposed guidelines would require that a U.S. exporter seeking to participate in the planning and construction of a proposed coal-fueled power plant and requiring assistance from U.S. Ex-Im can qualify for Bank support only if the project is designed to emit no more than 500 grams of carbon dioxide per kilowatt-hour of generated electricity (grams CO2/kWh) equivalent. This restriction equates to approximately 1100 lbs CO2/MWh, which is the same carbon dioxide emissions level that the Environmental Protection Agency (EPA) has proposed be required of new coal-fueled power plants to be built in the U.S.

CURC submitted comments in response to EPA's initially proposed rule requiring the application of CCS on new coal-fueled power plants located in the United States. [1] Since the EPA issued proposed CO2 emissions regulations in April of 2012 those proposed rules have been withdrawn and the EPA is expected to publish new proposed rules in the Federal Register at any time. A prepublication copy of the re-proposed rules indicate that newly constructed coal-fueled power plants will be required to achieve an 1100 lbs CO2/MWh emissions rate. CURC responded to the original proposed rule and will also reiterate when we comment on the yet-to-be published re-proposed rule that CCS technology is too costly and has not been adequately and reliably integrated into an electricity generation facility and demonstrated at commercial scale.

In the case of a U.S.-based coal-fueled power plant required to install CCS, it is very likely that electric utilities will choose to construct electric generation using natural gas or other energy resources and not coal. Notwithstanding the primary argument forwarded by the EPA that the CCS requirement will create a "technology driver" it is clear to CURC that the opposite will occur. Utilities have other proven options by which to generate electricity, particularly abundant and low cost natural gas. Without a foreseeable market opportunity, we believe also that equipment suppliers and technology developers will abandon plans to further develop CCS technology. In this same way, the Bank's proposed requirement that CCS be installed on any Bank-supported coal-fueled power plant will not drive technology development. Unless required by the host country, other foreign suppliers, whose governments do not pre-condition credit support on the need to install CCS technology, will be awarded contracts and U.S. exporters will simply lose market opportunities.

A brief review of currently projected costs for installing CCS technology to either gasification-based power production platforms or pulverized coal platforms might be informative.

First, the most highly efficient power plant constructed and in operation in the U.S. to date is an ultrasupercritical coal fueled power plant that has a CO2 emissions profile of approximately 1800 lbs CO2/MWh.[2] If the newly-proposed EPA standard were applicable to that modern facility (which, as an existing unit, will not be subject to the EPA rule that only applies to yet to be constructed plants), approximately forty percent of CO2 emissions would need to be captured and permanently sequestrated. In other words, one of the most efficient power plants located in the United States today would

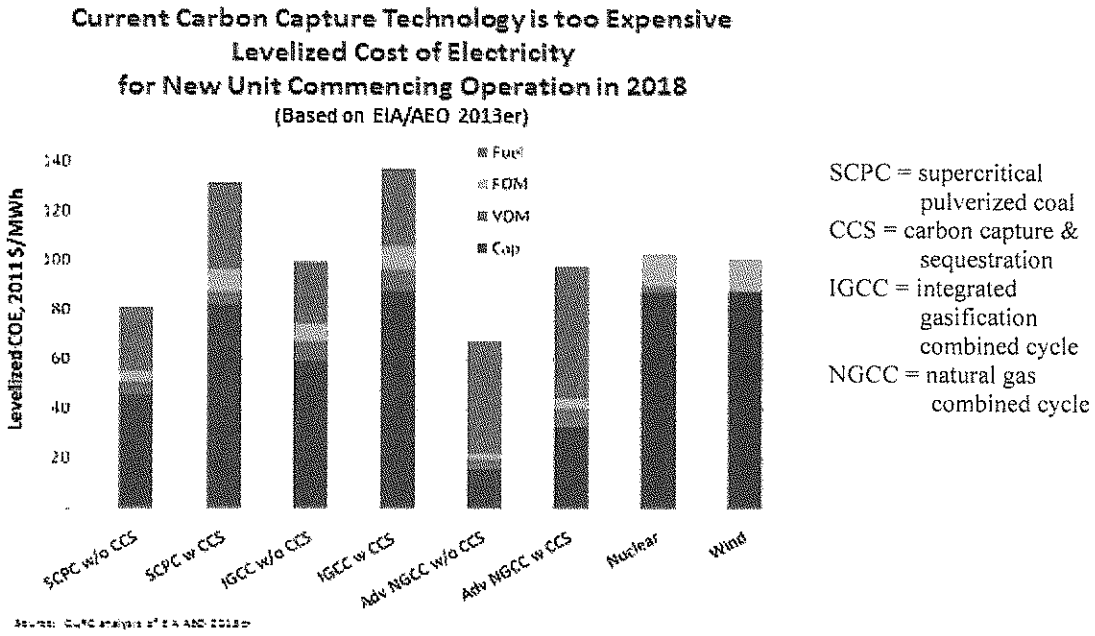
[1] The Agency initially proposed a rule on April 13, 2012, and has subsequently withdrawn that rule and indicated in a document that is a prepublication version, signed by the Administrator of EPA on September 20, 2013, that a re-proposed rule will be published in the Federal Register; that re-proposed rule has yet to be published.

[2] The plant is the John W. Turk Jr. coal-fired power plant, owned and operated by Southwestern Electric Power Company, an operating unit of American Electric Power. The CO2 emissions rate from this, or any other coal plant, will vary depending upon a number of circumstances involving operation of the plant.

not be able to meet the Bank's CO2 emission requirement without the installation of CO2 capture equipment.

There is currently no electricity generating plant, anywhere in the world, generating electricity and capturing its CO2 emissions.

Second the Energy Information Administration in its early release of the Annual Energy Outlook 2013 provides information about projected costs of electricity from coal-fueled power plants equipped with CCS technology compared to other sources of electricity generation beginning operation in 2018. The bar chart depicts those costs.

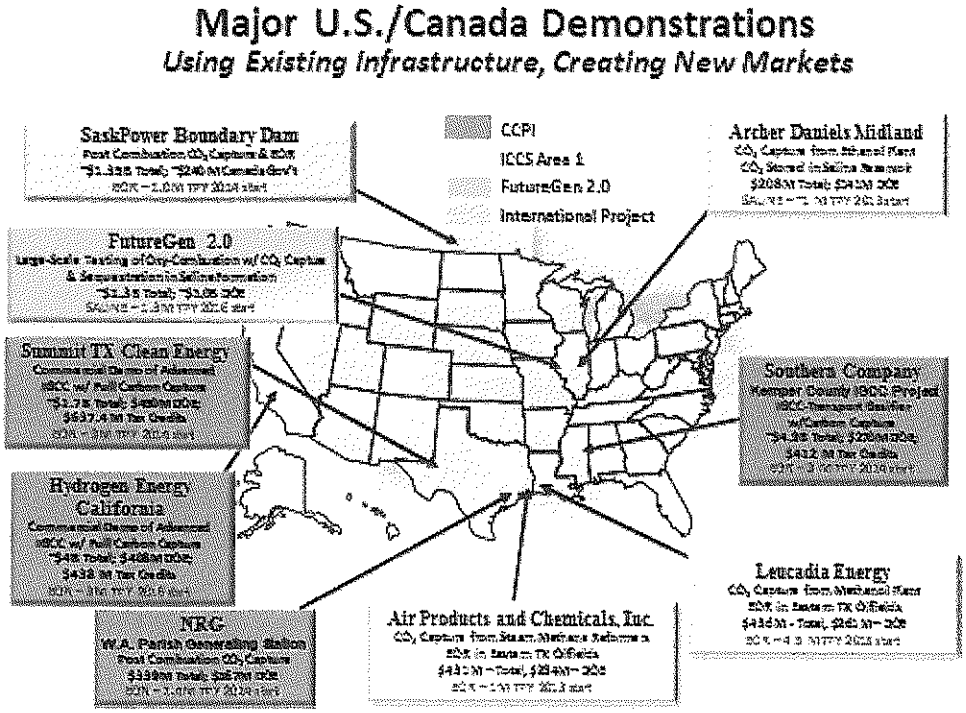


At 90% capture (as shown for SCPC or IGCC with CCS, in the above chart) we are not cost competitive with other available sources. Under the EPA's recently released re-proposed rule "partial capture" – 40 to 50% capture -- depending on the coal rank and power platform, would be required. Partial capture of CO2 on a SCPC unit will result in costs (measured as levelized cost of electricity) of $110/MWh. According to EPA's analysis, this cost is competitive with nuclear and wind projects in the U.S. but not competitive with a SCPC (without CCS) or a natural gas combined cycle unit constructed in the U.S. or elsewhere in the world.

If foreign competitors are not required by their credit support organizations to install CCS to be eligible for support (assuming other major considerations like equipment,

know-how, etc. are comparable) then those foreign competitors will be able to provide a lower overall cost and will be awarded the project.

Despite the fact that CCS technology is not commercially available and not yet installed on power generation plants anywhere in the world, the EPA, , has stated that CCS technology has been "adequately demonstrated." The EPA has listed five "demonstration" projects as evidence that CCS technology is ready. They are: SaskPower Boundary Dam; Summit TX; Hydrogen Energy; NRG; and Southern Company. It is important to note the estimated total costs of these demonstration plants. While it is expected that a second, third and additional projects utilizing these CCS technologies will decrease costs over time, requiring their use in commercial scale projects worldwide at this stage of technology maturity is not realistic.



Third, in addition to the cost challenge posed by currently available CO2 capture technologies, challenges exist for CO2 storage approaches. There are significant unresolved "legal framework" barriers to long-term CO2 storage in saline formations, including exposure to legal liabilities for scores of decades after closure of the power plant. While there appears to be very large potential storage sites for captured CO2 on the North American continent, that may not be the case in other areas of the globe where coal fueled power plants are to be constructed (because storage has not been assessed elsewhere in the world). Equally, important, while the use of CO2 for enhanced oil recovery is another potential avenue for CO2 sequestration in the United

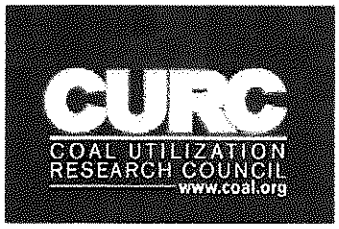
States, that is not necessarily the case elsewhere and again, a coal plant required to install CCS in another country faces a daunting and perhaps totally unrealistic requirement of CO2 sequestration that will simply operate to eliminate U.S. manufacturer participation.

The Bank's existing guidance sets a performance standard based upon a coal-fueled powerplant achieving a specificied level of performance. Indeed, this existing requirement is a standard that has been achieved by advanced coal plants in operation thereby demonstrating that we have the technology to achieve those levels of performance. It is worth noting that supporting highly efficient (heat rate) coal-fueled projects is the most immediate and effective way today to address CO2 emission. Each percent increase in coal conversion efficiency equates to approximately a 2.5% decrease in the total volume of CO2 emitted from that facility. Simply requiring the construction of a coal fueled powerplant that operates at so-called supercritical conditions (about 40% conversion efficiency) versus a subcritical unit that might operate at 35% or less efficiency means a 12% reduction in CO2 emissions over the life of that power plant compared to a less efficient plant. Relying upon currently available advanced technology (i.e. supercritical pulverized coal plants) will benefit the environment and not disadvantage U.S. exporters.

In addition to an emphasis on high efficiency, the Bank may wish to consider as a prerequisite to support of any U.S. exporter that the coal project in question be made "carbon capture ready." There are suitable definitions of such a requirement already set forth in a number of European countries that the Bank might consider adopting. We would be very pleased to provide additional information on this point and to work with the Bank in developing these standards.

Finally, CURC notes that the proposed definition of "High Carbon Intensity Projects" applies to "fossil fuel power generation plants" that emit greater than 650 grams CO2/KWh. The wording of this definition could open the door for restricting public financing for highly-efficient gas turbines running on liquid fuels. CURC recommends revising the wording to ensure the new policy reflects the President's intent to address coal-fired projects.

Thank you for this opportunity to comment on the proposed guidelines. We would reiterate that the President's goals to incorporate carbon capture technology on coal fueled power plants that are being constructed worldwide is laudable. However, the technology is not yet commercially available and requiring its use at this time simply means that the U.S. and its equipment and service providers will not participate in this global effort to provide electricity.



ADA-Environmental Solutions
Aerojet Rocketdyne, Inc.
Air Products and Chemicals
Alpha Natural Resources
Alstom Power, Inc.
American Coal Council
American Coalition for Clean Coal Electricity (ACCCE)
American Electric Power**
Anglo American Thermal Coal
Arch Coal, Inc.*
The Babcock & Wilcox Company
Battelle/Pacific Northwest National Laboratory
Caterpillar Global Mining
Center for Coal Technology Research at Purdue University
Cloud Peak Energy**
CONSOL Energy, Inc.
Duke Energy Services
Edison Electric Institute (EEI)
Electric Power Research Institute (EPRI)
Energy Industries of Ohio
FutureGen Industrial Alliance
Global CCS Institute
General Electric Company
The Greater Pittsburgh Chamber of Commerce
Illinois Coal Association
Illinois Department of Commerce and Economic Opportunity
Kentucky Coal Association
Kentucky Office of Energy Policy
LG&E Energy
Lehigh University
The Linde Group
Mitsubishi Heavy Industries America
National Rural Electric Cooperative Association (NRECA)
Ohio State University
Peabody Energy
Pennsylvania Coal Alliance
Penn State University
Praxair, Inc.
Schlumberger Carbon Services
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Southern Illinois University
State of Ohio, Air Quality Development Authority
Tri-State Generation & Transmission Association
United Mine Workers of America
University of Kentucky
University of North Dakota's Energy & Environmental Research Center
University of Texas @ Austin
University of Utah
University of Wyoming
West Virginia Coal Association
West Virginia University
Western Research Institute
Wyoming Mining Association

Companies in red indicate 2013 Steering Committee Members

* CURC 2013 Co-chairs
** CURC 2013 Vice-Chair

What is CURC?

The Coal Utilization Research Council is an industry advocacy group organized to promote the research, development, demonstration and deployment of technology that will enable the long term use of our nation's abundant coal supplies in a cost-effective and environmentally acceptable manner. Our mission is to achieve these goals while providing low cost energy and coal-derived products to the American consumer and promoting economic growth and energy security for the U.S.

Coal will continue its role in providing affordable, reliable and increasingly clean electricity as well as other valuable products derived from coal. The development and application of technology has enabled us to continue our successful track record in utilizing coal while reducing conventional pollutants and providing cost-competitive power. We will further advance clean coal technologies to improve – even more – upon the gains already made in the control of conventional pollutants. Technologies will also enable a new generation of coal utilization facilities that will greatly exceed the levels of conversion efficiency of today's power plants. And, technology is under development and demonstration that will be available to also address emissions of carbon dioxide.

Who are CURC's Members?

CURC brings together a range of corporate, nonprofit, educational and research organizations with an interest in keeping coal use competitive by promoting advances in technology. CURC's members include electric utilities, coal production companies, universities, research organizations, trade associations, state mineral resources agencies, and manufacturers of equipment. CURC's members collectively develop and recommend programs designed to develop and deploy competitive technology options for the marketplace and to ensure that coal remains a leading contributor to a balanced energy portfolio for our nation. *(2013 Membership List, over)*

Mapping a Path Forward for Coal Use

CURC members have developed an integrated technology program that captures several different aspects of the coal industry market. The objective of the program is to preserve the use of coal in a cost-competitive, environmentally superior and reliable way today and well into the future (2050 and beyond). The three-part CURC technology program is designed to encourage the use of coal in the:

- **Near-term** – apply technology solutions to the existing fleet of coal-fired electric generating plants to better insure efficiency, output, reliability and emissions-control (**Existing Plant Program**).
- **Mid-term** – authorize the construction of 10 GWs of advanced coal plants that are highly efficient and superior in ability to control emissions (**10 GW Advanced Coal Plant Program)** and that will install carbon capture systems when that technology is commercially available. A second program (the **Accelerated CO_2/EOR Program)** that provides financial incentives for the capture of CO_2 to recover crude oil while directing tax receipts and royalties from that recovered crude oil to pay for the CO_2 capture systems.
- **Long-term** – focus federal appropriations at levels currently provided by Congress toward a RD&D program **(the CURC/EPRI Technology Roadmap Program)** that has the goal of cost competitive, environmentally superior, and transformational uses of coal for the future.

GAS TURBINE ASSOCIATION

November 8, 2013

The Honorable Fred P. Hochberg
Chairman and President
Export-Import Bank of the United States
811 Vermont Ave NW
Washington DC 20571

Re: Supplemental guidelines for High Carbon Intensity Plants

Dear Chairman Hochberg,

The Gas Turbine Association (GTA) appreciates the opportunity to provide comments on US Eximbank's proposed "Supplemental Guidelines for High Carbon Intensity Plants."

The GTA is the industry trade association for the industrial and electrical power generation gas turbine manufacturers and the companies that support the industry. GTA serves as the unified voice of the gas turbine industry. Gas turbines generate more than a quarter of our nation's electricity and are playing a greater and greater role in our country's energy independence and future. Our OEM members provide more than 200,000 direct high quality jobs in gas turbines in the US.

GTA notes that the guidelines are being proposed in order to adapt to the President's new policy to prohibit public financing for coal projects overseas, with limited exceptions. The guidelines, however, refer to "fossil fuel power generation plants" that exceed certain CO2 emissions limitations.

GTA believes that in referring to "fossil fuel power generation plants," Exim is unintentionally opening the door to creating new and burdensome requirements for exporters of gas turbines that operate on alternative fuels, such as distillate or heavy fuel oil.

GTA recommends revising the language of the proposed guidelines to ensure that they remain consistent with the President's clear intent to address public financing of coal projects, as opposed to gas turbine technology.

Very truly yours,

Robert G. Hilton
Chair, Board of Directors
Gas Turbine Association
118 Windsor Avenue
Kensington, CA 94708

Comments on "Supplemental Guidelines for High Carbon Intensity Projects"

Background. The General Electric Company (GE) appreciates the opportunity to provide comments on the US Export Import Bank's (Exim) proposed "Supplemental Guidelines for High Carbon Intensity Plants." GE is a leading provider of advanced power generation technology and services. From FlexEfficiency Combined Cycle power, to smart grids that help utilities manage electricity demand, to gas engines that run on organic waste, GE technology currently helps to deliver a quarter of the world's electricity. GE has deep experience with power generation applications using nearly every form of fuel, including natural gas, liquids, renewables, nuclear, and cleaner coal.

Economic and employment implications. GE exports large volumes of its power generation equipment to markets all over the world. In 2012 alone, GE exported 94% of the gas turbines manufactured at its facility in Greeenville, South Carolina, to countries as diverse as Mexico, Peru, Egypt and Japan. In the same year, GE likewise exported 100% of the steam turbines manufactured at its facility in Schenectady, NY. GE employs approximately 3,500 people in Greenville, and approximately 3,000 in Schenectady. These exports are critical to sustaining employment at GE's facilities, as well as thousands of additional jobs among hundreds of the company's suppliers – many of which are small and medium-sized enterprises.

Financing is a critical piece of GE's competitiveness, so the company appreciates its long history of collaboration with Exim in the pursuit of global projects. In many cases, access to financing represents a significant proportion of a customer's evaluation criteria, and Exim's involvement in a deal can at times determine the difference between an order and a loss. GE highlights these facts to underscore that Exim's proposed guidelines could have a direct impact on jobs in the United States. A well-designed policy can support these jobs, and a poorly designed one can undermine them.

GHG impacts of steam turbine technology. GE supplies steam turbines for use in natural gas combined cycle power projects and coal-fired steam projects. In recent years, GE has invested significantly to increase the efficiency of its steam turbine platforms and make them more competitive. GE competes with European, Korean, Japanese and Chinese equipment providers. GE's steam turbines are essentially equivalent to European equipment in terms of efficiency and resulting CO2 emissions, but are more efficient than Korean, Japanese or Chinese equivalents. For plants using Korean or Japanese equipment instead of GE technology, net plant efficiency decreases by about 0.5% and CO2 emissions increase by approximately 1% in terms of tons/KWh. With Chinese equipment, efficiency decreases by about 1-2% while CO2 emissions increase by approximately 2-2.5% in terms of tons/KWh. In other words, over the life of a plant, the deployment of GE equipment can yield meaningful savings in total CO2 emissions in comparison with competing technologies from Asia.

Need for a broad approach to evaluating exceptions. These figures illustrate a critical potential consequence of Exim's proposed new policy. If Exim is prohibited from providing financing for US-manufactured equipment while appropriate financing remains available to European or Asian manufacturers, it would do nothing to deter the construction of new plants using foreign equipment and financing. Moreover, if those plants utilize Asian equipment, they would produce greater volumes of greenhouse gas and other emissions than if Exim were supporting US-manufactured equipment. In evaluating exceptions to the new policy, Exim should carefully consider whether global greenhouse gas emissions would actually increase absent Exim's involvement.

Need for grandfathering previously-reviewed projects. The timing and manner of the announcement of the new policy has had important commercial consequences. GE has several steam projects in the pipeline, some of which have been developing for years and had received Letters of Interest (LOI's) from Exim. By virtue of the fact that there was no prior consultation with the business community, GE was unable to prepare those customers or undertake an orderly process to obtain alternative sources of financing. Even now, the lack of final guidance on implementing procedures makes it difficult for GE to provide clear information to its customers. Exim accordingly should consider grandfathering projects for which it had previously issued LOI's. This would eliminate the substantial uncertainty that vendors are currently facing with a small group of select customers. From a foreign policy perspective, it also would help to preserve the US government's credibility with certain key allies.

Need to avoid unintended prohibition of cleaner gas technologies. Most importantly, there appears to some confusion over what technologies are actually covered in the guidelines. In the President's June 25 speech announcing the new policy, and in the accompanying 20-page "Climate Action Plan" issued by the White House, there are repeated, unambiguous statements that the new policy applies solely to the financing of coal projects overseas. Exim's proposed Supplemental Guidelines, however, refer to "fossil fuel power generation plants" in Section I (b) (iii). When coupled with the requirement that "fossil fuel" plants emit no more than 650 grams of CO2/KWh), this raises the prospect that Exim is seeking to limit support for gas turbine technologies that run on "opportunity" fuels, such as liquids or heavy fuel oil, or run on natural gas with liquids as a backup fuel.

GE gas turbine technology has been operating on these types of alternative fuels since the 1960's, with more than 300 gas turbines in operation or on order. It is an important segment of the overall market for gas turbines, with opportunities in regions as diverse as Latin America, Africa, the Middle East, China and South Asia. The deployment of gas turbines in these sorts of applications offers significant environmental benefits in comparison to traditional solutions employing boilers and steam turbines. A gas turbine

operating on heavy fuel oil can bring efficiency levels as high as 46%, which can mean efficiency gains of several percentage points in comparison to a boiler/steam turbine solution.

GE's gas turbines are capable of firing a broad range of gaseous and liquid fuels while meeting the International Finance Corporation (IFC) emissions criteria, including IFC's performance standards for Nitrogen Oxides (NO_x). These emissions criteria are satisfied through a combination of clean combustion, combustion diluent injection (most commonly, water injection) and post-combustion emission control technologies such as selective catalytic reduction.

Plants that run on natural gas in simple cycle operations, or natural gas turbines running on alternative liquid fuels should clearly be considered beyond the scope of the President's new policy, and the guidelines should be revised in order to be consistent with that policy.

Need to clarify key terminology. Exim should clarify that the emissions limit of 650 grams of CO2 per kilowatt hour refers to plants that are operating in baseload applications. As written, it is implied. Exim should revise the language to eliminate uncertainty.

Need to preserve user-friendly approach to exceptions. GE believes that section II (a) (i) is suitably flexible in its definition of the "most efficient technology available." As Exim evaluates potential exceptions, it should recognize that subcritical technology often is the most efficient coal technology available for smaller plants with capacities of 400MW or less. The need for smaller-sized plants is particularly acute in island countries such as the Philippines and the Dominican Republic, which typically do not have sufficiently robust national grids to support plants larger than 400MW. For plants of that megawatt range, it is not economically feasible to use supercritical equipment as it would be impossible for plant developers to earn a return on their investment. This dynamic applies in developed and developing markets alike, including the United States.

GE is concerned about the potential for uncertainty about the burden of proof on what may be considered "economically feasible." This is particularly the case in Section II (a) (ii). Here, the requirement to demonstrate the lack of feasibility of alternatives may be so great as to render the exception impractical for a potential applicant. For instance, natural gas would not be an affordable alternative in countries which have to import liquefied natural gas, i.e. Vietnam, the Dominican Republic, and the Philippines, because its cost will be about $10 per unit higher than coal. Similarly, Integrated Gasification Combined Cycle technology coupled with Carbon Capture and Storage (CCS) is a highly impractical alternative for virtually every developing nation. As written, however, the

guidelines would require "all technically available options" to be considered, fully evaluated, and rejected (including, by implication, LNG and IGCC/CCS options) before the exception will be considered. Exim should consider redrafting this section to clarify that unrealistic options, while "technically feasible," need not be evaluated.

Need for flexibility in determining country-specific eligibility. In Attachment 1 to the Supplemental Guidelines, Exim proposes to adopt a World Bank list of the "world's poorest" countries to establish eligibility for exceptions to the new policy. This list appears to be arbitrary and unnecessarily exclusive. For instance, it excludes two Asian countries – Vietnam and Indonesia – that are by most reasonable standards considered low-income. In fact, according to World Bank data, 11 countries on Exim's proposed list of eligible countries have higher per capita incomes than Vietnam, and four countries have higher per capita incomes than Indonesia.

Perhaps more importantly, both Vietnam and Indonesia are highly constrained in their fuel choices. A blanket, no-exceptions approach to financing coal projects in those and similar countries will not encourage their adoption of less carbon-intensive fuel choices, but may in fact lead them to choose less efficient technologies to utilize coal. GE estimates that from 2005 – 2012, Vietnam selected Chinese manufacturers for 53% of the country's steam turbine orders. For Indonesia, it was 73%. As noted above, US-manufactured steam turbines are much more efficient in comparison with Chinese-manufactured equipment. If Exim were to exclude Vietnam and Indonesia from consideration, it would simply create a perverse incentive for both to emit greater volumes of CO2 through broader deployment of Chinese technology.

Exim should clearly expand the list of eligible countries. Specifically, the list should include poorer, coal-dependent countries that are more likely to deploy less efficient foreign technologies leading to greater volumes of CO2 emissions absent Exim's involvement. The US Agency for International Development maintains a list of developing countries, which may offer a suitable alternative to Exim bank's proposed list of eligible countries.

Again, GE appreciates the opportunity to provide these comments. The company is pleased to make itself available to Exim if there is a need for clarification or additional questions about any of the above.

From:	Howlett, Steve (GE Global Operations) <steve.howlett@ge.com>
Sent:	Friday, November 08, 2013 3:18 PM
To:	Enviro Specialist; James Mahoney; Isabel Galdiz
Cc:	Scott Schloegel; Chadwick, Bob M. (GE Global Operations); Xu, Charles (GE Global Operations); Herold, Rich (GE Corporate); Gaffney, Caroline (GE Global Operations)
Subject:	Comments from GE Transportation

We would echo the sentiments submitted on behalf of GE Power and Water and would wish to further elaborate as pertaining to GE Transportation, which manufactures small diesel gensets.

As discussed in the public forum, we note that there was not a small power plant exception. Current IFC standards exempt transactions under 50MW from many standard environmental requirements. We would encourage US Ex-Im Bank to adopt such a standard exemption in its new guidelines related to carbon intensity.

As always, we are available for consultation or questions.

Regards,

Steve

Steven W. Howlett
Managing Director
Government Finance
General Electric
Washington, DC

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Manufacturers

November 8, 2012

The Honorable Fred P. Hochberg
Chairman and President
U.S. Export-Import Bank
811 Vermont Avenue NW
Washington, DC 20571

Re: Supplemental Guidelines for High Carbon Intensity Projects (Annex A-2)

Dear Chairman Hochberg:

The National Association of Manufacturers (NAM) welcomes the opportunity to comment on the *draft Supplemental Guidelines for High Carbon Intensity* Projects (proposed on September 30, 2013).

The NAM is the largest manufacturing association in the United States, representing small and large manufacturers in every industrial sector and in all 50 states. Manufacturing employs nearly 12 million men and women, contributes more than $1.8 trillion to the U.S. economy annually, has the largest economic impact of any major sector and accounts for two-thirds of private-sector research and development. The ability of U.S. companies to export has always been a critical issue for the NAM, and exports are increasingly important to the U.S. economy and to the success of domestic manufacturing.

Fundamentally, the NAM strongly supports the U.S. Export-Import Bank's mission to support U.S. jobs through exports and views the Bank as one of the most important tools the U.S. government has to help grow U.S. exports and jobs, which is now more important than ever to U.S. companies. Ex-Im is the only tool American manufacturers have to counter the approximately $1 trillion in export financing that other governments provide their exporters. Without Ex-Im Bank support, customers may turn to foreign competitors that have support from aggressive foreign export credit agencies to the detriment of U.S. industry and jobs. America's manufacturers cannot afford to be defenseless in today's global marketplace.

As part of the "Climate Action Plan" released on June 25, President Obama called for an end to U.S. support for foreign coal-fired power plants, unless they are in the poorest nations or equipped with prohibitively expensive carbon-capture and sequestration technology. On September 30, Ex-Im sought to implement this policy through its proposed *Supplemental Guidelines for High Carbon Intensity Projects* under which Ex-Im would no longer provide financing to U.S. manufacturers that are exporting goods and services to foreign coal-fired power plants, except where the projects meet the exceptions in the Climate Action Plan.

Manufacturers strongly oppose the proposed supplemental guidelines and urge Ex-Im to withdraw them as soon as possible. Most importantly, these proposed supplemental guidelines are directly contrary to the mission of the Ex-Im Bank to support U.S. jobs and grow exports. The Ex-Im Bank's Charter is explicit about its objectives and purposes:

> The objects and purposes of the Bank shall be to aid in financing and to facilitate exports of goods and services, imports, and the exchange of commodities and services between the United States or any of its territories or insular possessions and any foreign country or the agencies or nationals of any such country, and in so doing to contribute to the employment of United States workers. The Bank's objective in authorizing loans, guarantees, insurance, and credits shall be to contribute to maintaining or increasing employment of United States workers.[1]

These guidelines would severely impede U.S. exports of equipment and services that support U.S. jobs. Given that foreign countries will step in to provide financing support for their domestic companies bidding to supply the equipment and services for energy projects, the projects will undoubtedly proceed, but manufacturers and their employees in the United States will be left on the sidelines, costing jobs and economic growth.

The proposed guidelines would cut off the supply of U.S. goods and services to countries that need reliable electricity from coal and certain other fossil fuels. Mine-mouth power projects are often a country's very best option for low-cost, reliable electricity. Meanwhile, demand for coal and other energy sources continues to rise around the world as countries develop and millions of people are lifted out of poverty and begin to seek industrial and economic gains. Examples abound of official export credit agency (ECA) support for energy and infrastructure projects that ensure steady energy supplies to countries with these growing demands.

While reducing greenhouse gas emissions is the aim of the guidelines, and Ex-Im currently has authority to consider the environmental impacts of financing applications, Ex-Im's proposed ban on financing of U.S. equipment and services to coal-fired power plants would not achieve that objective. Rather than moving other nations away from coal as an energy source, this unilateral ban would merely encourage foreign customers to choose non-U.S. suppliers for the equipment and services needs as other ECAs are more than willing to support such projects. Given that U.S.-manufactured power generating equipment is of the most efficient in the world, and U.S. services tend to reflect high environmental standards, the end result will be that foreign nations pick a far less environmentally friendly option for their projects. The global coal industry will continue to grow to meet consumer demand, with or without the participation of U.S. equipment and services. As a result, these guidelines will not produce the environmental benefits sought, while costing domestic manufacturing jobs and growth.

There is an enormous emerging global market for advanced coal technologies. If U.S. manufacturers are effectively excluded from participating in these markets, others will lead in developing the next generation of power plant technologies. Further, the proposed guidelines would impede the ability of the U.S. government, as well as U.S. manufacturers, to work cooperatively with foreign countries as they develop energy resources, undermining broader national interests of the United States, counter to the mission of Ex-Im Bank.

We appreciate this opportunity to comment on the proposed draft for *Supplemental Guidelines for High Carbon Intensity Projects* (Annex A-2). Manufacturers strongly urge the

[1] Ex-Im Bank Charter

withdrawal of this proposal and stand ready to consult with Ex-Im Bank on ways to maximize U.S. exports and grow jobs here at home.

Respectfully,

Linda Menghetti Dempsey

Veronika Kohler
Director of international Policy

November 8, 2013

James A. Mahoney
Vice President, Engineering and Environment
Export-Import Bank of the U.S.
Washington, DC 20571

Dear Mr Mahoney:

The National Mining Association appreciates the opportunity to provide comments on the draft Export-Import Bank (Ex-Im Bank) Supplemental Environmental Guidelines for High Carbon Intensity Projects.

The draft guidelines, which memorialize the recent announcement by the Treasury Department, will, as we discuss in greater detail below, not have the intended positive gain but unfortunately, deprive hundreds of millions of people across the globe access to affordable, reliable electricity, while at the same time adversely impacting the U.S. economy. As an independent agency the Ex-Im Bank has a mandate, articulated in its charter, to provide fully competitive financing on behalf of U.S. exporters, so as to maximize the jobs generated by American exports. Beyond this however, we believe the bank has a moral obligation to assist in bringing additions in electricity supply to the developing world – and coal is the energy source to fuel this growth. We object to the guidelines' singular, prejudicial focus on coal. Highlighted below are key areas in which we believe these policy changes will adversely impact the U.S. economy and businesses and undermine the intended environmental benefits:

1. The primary impact of the policy will be to deny potential economic opportunities to U.S. exporters. The intended environmental impact will not be achieved as the vast majority of electric generation projects, including those that use coal, go forward without Ex-Im Bank support. The primary purpose of the Ex-Im Bank is to aid U.S. exporters into an enhanced position vis-à-vis their competitors for any project in which the Ex-Im Bank becomes involved. The policy will not deter any coal fired power generation projects from being developed now or in the future but will only handicap U.S. industry from participating in those projects, in direct conflict with the

Ex-Im Bank's first priority of supporting and growing U.S. jobs. Additionally, excluding U.S. technology leads to adverse environmental impacts (detailed below) as these plants are then built utilizing foreign technology and potentially inferior to U.S. standards. Also, eliminating the incentive to develop innovative technology would preclude the U.S. from participating in what may be a trillion dollar industry.

2. Coal generated electricity plays a necessary global role in alleviating poverty. It has and will continue to contribute to a global improved quality of life, including but not limited to worldwide life expectancy, monumental increase in global GDP, and the continued efforts to electrify billions of people living in underdeveloped countries. The Global Energy Network Institutes has confirmed, "Every single one of the United Nations' Millennium Development Goals requires access to electricity as a necessary prerequisite." The International Energy Agency's (IEA) Fatih Birol, agrees and states "The importance of coal in the global energy mix is now the highest since 1971. It remains the backbone of electricity generation and has been the fuel underpinning the rapid industrialization of emerging economies, helping to raise living standards and lift hundreds of millions of people out of poverty". This policy would deny developing counties these opportunities and the associated environmental improvements correlated with higher standards of living. For a clear example, one needs only to turn to China's remarkable development whereby coal-based energy has lifted 300 million of its people out of poverty (IEA, 2007).

   According to the International Energy Agency (IEA), global demand for electricity will nearly double in 2035 over 2010 levels, from 18,443 TWh to 34,889 TWh as will electricity generated from coal, from 8,687 TWh to 16,814 TWh. Coal's share of total power generation will actually rise slightly from 40.6% to 41.7%. These projections reflect the fact that the lack of electricity, and the poverty that goes with it, is by far the most pressing risk faced by developing countries. To alleviate poverty, countries will look to economical and reliable sources of electricity such as coal. As noted by IEA, "Modern energy services are crucial to human well-being and to a country's economic development; and yet globally over 1.3 billion people are without access to electricity and 2.6 billion people are without clean cooking facilities. More than 95% of these people are either in sub-Saharan African or developing Asia and 84% are in rural areas. The lack of access to modern energy services is a serious hindrance to economic and social development (Energy Poverty, http://www.iea.org/topics/energypoverty/)."

3. Coal usage in the developing and emerging markets will continue to increase because the supply is abundant, secure, geographically widespread, and offers long term price stability with little additional infrastructure required to move it to market.

4. The proposed rule seeks to provide a net environmental benefit by eliminating funding for existing coal fired power plant upgrades and efficiency improvements. We find this counterproductive since high-efficiency low-emissions coal combustion

technologies are commercially available and, if deployed, can substantially reduce greenhouse gas emissions from the entire power sector As noted by IEA, "an older coal-fired power plant with subcritical steam conditions operating at 35% efficiency might be replaced by a new [supercritical] one operating at 45%, reducing fuel use and CO2 emissions by 22%." Thus, the draft guidelines eliminate a low-hanging fruit approach to global GHG mitigation, an approach that merits serious consideration especially in the current context of global economic slowdown.

5. The International Energy Agency (IEA) has clearly and repeatedly stated in its annual World Energy Outlook that use of coal for power generation will continue to increase until 2035-2040 and will remain an integral part of the energy mix after that. Additionally, IEA forecasts that the worldwide coal-fired power fleet will have to be completely comprised of advanced technology including CCS by 2050 to meet their energy roadmap targets for near zero emissions from coal. We believe a prudent course for the Ex-Im Bank would be development, working with the IEA, of a responsible climate change action plan and financing mechanism, which embraces the near zero emissions target by upgrading the existing fleet and promoting the construction of efficient, environmentally friendly super-critical coal-fired generating units, especially since these high efficiency plants are a prerequisite for the development of CCS.

6. The guidelines appear to have a singular, prejudicial focus on coal-based power generation. The exclusive focus on power plant emissions fails to take into account the full global warming potential (GWP) of all fossil fuels, which puts coal at an unfair disadvantage. For example, the IPCC has shown in its most recent assessment report that the GWP of natural gas is 34 times more potent than CO2 over 100 years and 86 times more potent over 20 years. For example, a study in the journal Geophysical Research Letters, conducted by the Cooperative Institute for Research in Environmental Sciences (affiliated with NOAA), between 6 percent and 12 percent of the Uinta Basin's natural gas production could be escaping into the atmosphere. Similar results can be expected from gas production facilities outside the US. If the purpose of the guidelines is to reduce GWP, then their failure to recognize this source of GWP renders them meaningless.

7. U.S. manufacturing industry works in a highly regulated environment producing long lasting energy efficient products improving the overall sustainability footprint of their application in multiple ways;
    a. U.S. products are manufactured in the most environmentally friendly manner given strict U.S. regulations;
    b. The durability of U.S. products require less frequent replacement resulting in less overall energy consumed per unit of output;
    c. The products and services provided to the global coal industry by U.S. manufacturers integrate environmental considerations that are more rigorous and disciplined that those of their foreign competitors.

Given that coal-based generation will continue to grow globally and supply the energy needs to the developing world, with or without the participation of U.S. equipment and services, the draft guidelines will merely result in the transfer of the required manufacturing jobs to other countries. Currently, over $23 billion of mining machinery is exported annually. Denying this and the export of other equipment and services is a huge missed economic opportunity and flies in the face of the President's export initiative.

8. Lastly, and importantly, the Bank's authority to implement procedures to "take into account the potential beneficial and adverse environmental effects" of a project is limited to those procedures which are "consistent with the objectives of Section 635(b)(1)(A)." Any procedures that do not maintain "fully competitive" finance conditions are at odds with this limitation on the Bank's authority.

To summarize, we believe this new policy will have adverse consequences for U.S. industry and fail to achieve intended goals. By including U.S. advanced coal fired technologies in the Ex-I'm Bank prohibition, the policy will deprive the global market of the benefits of technologies that will best ameliorate the carbon emissions that flow from these projects.

It will also destroy any incentive by business to continue to develop even better technologies that further reduce carbon emissions while utilizing the most available fuel source for power generation. Much can be done to improve the generation technologies but only if U.S. companies can obtain competitive financing with which to sell their technology overseas.

The result of this policy will be the loss of thousands of U.S. jobs as the Ex-Im Bank, by denying financing, closes off a market in which U.S. companies have the best available technology while denying a tremendous opportunity for the U.S. to supply coal powered energy to address the developing world's dramatic energy needs. We believe that the Bank must, while emphasizing renewables not abandon the rest of the energy spectrum. Creating an incentive structure to support and promote advanced technologies and encourage further technological enhancement would achieve the administrations climate goals, support U.S. industry, and work towards a global energy mix that meets sustainable goals.

Kind Regards,

Veronika Kohler
Director, International Policy

COMMENTS ON THE U.S. EXPORT-IMPORT BANK'S REVISED SUPPLEMENTAL GUIDELINES FOR HIGH CARBON INTENSITY PROJECTS

NATURAL RESOURCES DEFENSE COUNCIL[1]

Since 2007, the U.S. Export-Import (Ex-Im) Bank has invested $7.2 billion in coal projects, with $2.2 billion invested in coal power plants and $5.2 billion in coal mining.[i] While Ex-Im's investments in coal projects aren't the worst amongst international financial institutions, analysis from NRDC has found that Ex-Im is near the top in terms of total coal investments over this period.[ii] Limited resources from Ex-Im should be focused on investments that promote renewable energy, energy efficiency, carbon capture and storage (CCS) deployment, and other actions that significantly reduce greenhouse gas emissions.

We welcome the recognition that Ex-Im needs to reform its guidelines in light of President Obama's commitment in the Climate Action Plan to stop supporting overseas coal projects that don't capture their carbon. At the same time, a number of international financial institutions (IFIs) – such as the World Bank and European Investment Bank – have moved in this direction and more institutions are considering such a move. Ex-Im has a chance to stake out a leadership position in this effort to reform the use of public financing for coal projects that are driving climate change. We expect that Ex-Im will lead the charge by significantly reforming its own guidelines and actions, while actively pushing other similar institutions to shift their own practices. With coal emissions playing a critical role in driving climate change, now is clearly the time to shift public financing away from these investments.

In response to Ex-Im's request for comments on revisions to the *Supplemental Guidelines for High Carbon Intensity Projects*[iii], the Natural Resources Defense Council (NRDC) outlines the following three key comments on the revised guidelines and the operations of Ex-Im.

I. Definition of High-Carbon Intensity should include all types of coal projects

In implementing President Obama's guidance and in our comments to other IFIs, NRDC has stressed two important definitional issues regarding "coal projects".

First, we have stressed that the definition of a coal power plant should not be narrowly defined to a new greenfield power plant, but should instead cover the broad scope of "power plants" that have been the source of funding by IFIs. The revised Ex-Im guidelines correctly:

- includes all types coal plants including new greenfield projects, any portion of an integrated mine-mouth plant, and life-extension retrofits of coal plants within the definition of covered projects;
- excludes the renewable portion of a hybrid plant; and
- allows air pollution controls for SO_2, NO_x, mercury, and air toxics.

[1] Please contact the following for inquiries on this submission: Jake Schmidt, International Climate Policy Director, NRDC, email: jschmidt@nrdc.org, phone: +1-202-289-2388.

Second, we have urged that these restrictions apply to the financing of associated infrastructure upon which a coal plant depends, such as coal mines, ports, rail links, and transmission and distribution networks. In our view you can't separate coal power plants from coal mining given the inextricable link between the two in the amount of carbon pollution that is emitted into the atmosphere. Ex-Im follows IFC's Performance Standard 1 as a signatory to the Equator Principles. This standard applies to related facilities that "would not have been constructed or expanded if the project did not exist and without which the project would not be viable." The Ex-Im guidelines should be extended to cover these criteria at a minimum in their definition of "High Carbon Intensity Project". In particular, the revised Ex-Im guidelines should be modified to include the following in the definition of high-carbon intensity products (i.e., modify I.b by including additional definitional issues):

- coal mining investments outside the U.S., including direct investments in the coal mine, coal mining equipment, and ports expansion to increase coal imports;
- coal export investments within the U.S., including "Working Capital Loans and Guarantees";
- transmission and distribution investments that are clearly aimed at expanding coal power plants; and
- rail projects or other infrastructure investments that are aimed at expanding access to coal.

II. Emissions Threshold for High Carbon Intensity Projects

In addition to modifying the definition of High Carbon Intensity Projects (HCIP), it is important that Ex-Im establish a stringent threshold. This threshold should require the use of best technology to avoid being classified as a HCIP and thus subject to more stringent requirements outlined in the proposed guidelines. In addition, Ex-Im can better align its standards with the Treasury guidelines and EIB and avoid having confusing and contradictory guidelines for project proponents. Towards this end Ex-Im should (i.e., modify the definition in I.b):

- Lower the definition of HCIP to 500 g-CO2e/kWh.

III. Definition of "Best Available Technology" in the World's Poorest Countries

President Obama's Climate Action Plan correctly requires that any coal project apply the best available technology. The Ex-Im guidelines on "best available technology" should be strengthened in two ways.

First, the "most efficient coal technology" provision should require the use of the most efficient technologies currently being sold on global markets, as is mandated by Treasury's coal guidelines. The Ex-Im guidelines are either not as aggressive or need further clarification. As written the "best available technology" determination could be narrowly based upon what is currently available in the country where the project is being deployed. As a result, the definition in the Ex-Im guidelines are overly broad. The most efficient coal technologies currently available in the global market are Advanced or Ultra-supercritical Combustion ("USC") and Integrated

Gasification Combined Cycle ("IGCC"). These technologies have been in common use throughout the world for a decade.[iv] Each is capable of thermal efficiencies greater than 45 percent and greenhouse gas emission rates of approximately 800 g/kWh—about 20-30 percent less than a new subcritical plant. Advanced Ultra-supercritical designs with 47 percent or greater efficiencies should be commercially available in the next few years.[v] In addition, supplemental technologies, such as coal drying, using waste heat or renewable energy, should be examined and required where applicable. The Ex-Im guidelines should be enhanced by clarifying to:

- Require that only "the most efficient technology *available internationally*" is allowed (i.e., change reference in II.1.i) and drop reference to "appropriate" in II.a.i and replace with "best internationally available technology"
- Specify that only USC or IGCC plants meet this definition (i.e., add a separate sentence in II.a.i specifying that these are the minimum acceptable technologies); and
- Outline that other best practices, such as coal drying, using waste heat, and/or renewable energy, will also be required (i.e., add separate sentence or footnote to the this effect.

Second, technologies to control local air pollution such as NO_x, SO_2, $PM_{2.5}$, and mercury are globally available. Given the heavy-toll of air pollution on children, the elderly, and other at risk populations it is critical that any project deploy state-of-the-art pollution control technologies. With new findings about the public health damage of uncontrolled coal plants, it is unconscionable to not require advanced technologies that reduce local air pollution and contamination. Towards this end, the Ex-Im guidelines should outline that best internationally available technology:

- Requires installation and deployment of advanced emissions controls for NO_x, SO_2, and mercury (i.e., specify in II.a.i that projects must use "advanced emissions controls for local air pollution").

IV. Specify that the project must be in line with international commitments and low emissions development strategies

The project proponent should be required to prove that the specific project fits within the low emissions development strategy of the country and within the emissions reduction target that the country internationally committed to pursuant to the Copenhagen Accord and the Cancun Agreements. With over 90 countries committing to explicit emission reduction targets[vi] – at the strong push of the U.S. – it is unacceptable to fund projects don't align with this agreement that the U.S. strongly supported. Choosing to fund projects that aren't in line with these internationally commitments is tantamount to the U.S. signaling that it accepts non-compliance with international commitments. To correct this the Ex-Im guidelines should be modified to:

- Add an additional factor that requires that all HCIP projects must prove that they are in line with the low emissions development strategy and international climate commitments of the target (i.e., add a specific new factor – in front of II.a – which specifies that: "All projects must prove that they are in line with a countries international climate commitments and its low emissions development strategy".

V. Alternatives Assessment

How the alternatives assessment is conducted is a critical factor in judging whether any coal project is truly needed. President Obama's commitment puts the onus on the project proponents to justify that any proposed coal plant is needed to meet a specified energy need and that the particular technology is the best means to serve that energy need. Too often a coal project is proposed and opponents are required to justify that they can show that clean energy is readily available to meet that energy need. The proof must be flipped so that the project proponent is required to justify their project as the only technology that can meet a specific energy need. At the same time, the alternatives assessment must reflect the true cost of the project including the damaging health and climate change implications of the project. Towards this end, we suggest three essential changes to the alternative assessments as specified in the draft revised guidelines.

First, energy efficiency – both supply and demand – is a viable source of energy across the world. The guidelines unfortunately don't specify that the alternatives analysis must include assessments of energy efficiency. In addition, grid upgrades should also be considered. In particular the guidelines should be modified:

- To specify that the project proponents must assess energy efficiency, grid upgrades, etc (i.e., make this clear in II.a.ii).

Second, the alternatives assessments should include the environmental and greenhouse gas costs in the project value analysis. We support the inclusion of a carbon price or social cost of carbon into the assessments of projects. Such a value should take into account both the short-term and long-term impacts of climate change and the associated values. The US government uses a social cost of carbon which could be basis for Ex-Im assessments. In addition, because there are real and tangible health, life, and economic values from decisions to deploy fossil-fuels, environmental and social costs must be quantified and added to costs of the energy to be generated. These costs should also be adjusted upwards for any implicit or explicit fossil fuel subsidies. Specifically, the guidelines should require that the alternative assessments include a quantification of the:

- cost of carbon (i.e., specify this requirement in II.a.ii); and
- cost of human health and environmental damage from the project (i.e., specify this requirement in II.a.ii).

Lastly, the cost of fuel supply, the project materials (e.g., cement and steel), and other factors are likely to change during the life of the project (e.g., 40-50 years). The alternative assessments should include a real assessment of the likely changes in prices and "sensitivity" analysis to show the likely financial risks of the project.

VI. Definition of CCS Deployment

The Ex-Im draft revised guidelines rightly outline that coal projects outside of the world's poorest countries must deploy carbon capture and sequestration technologies (CCS) to be eligible for support. This importantly will bring Ex-Im guidelines in conformity with the U.S. Climate Action Plan. We welcome the codification of the "deployment" aspect of the CCS requirement

by establishing an emissions threshold of 500g CO_2e/kWh (1100 lb/MWh) and a requirement that the CCS be deployed within one year. In addition the guidelines correctly clarify that the CO_2 must be transported and stored in an environmentally safe and permanent manner. However the guidelines need clarification by:

- Stating that all types of CCS must meet the 500g CO_2e/kWh (i.e., drop the "should" in II.a.iv); and
- Making it clear that all CO2 from CCS must "be separated from the emissions stream and transported to a storage site for the purpose of environmentally safe and permanent geological storage of the carbon" (i.e., make this clearly a requirement for all types of CCS as specified in II.a.iv).

VII. Enhance Transparency

The designation of a project proposal as a HCIP will trigger an enhanced due diligence review as required by Ex-Im. This signals the risk that this project will be out of conformity of the Ex-Im guidelines. Unfortunately there is no transparency of this review. This is the exact opposite principle for any project, especially one that triggers extra review. The guidelines should add an explicit new section (i.e., Section IV) that requires the Enhanced Due Diligence Memorandum:

- be made publicly available 120 days in advance of a decision;
- be subject to public consultation; prepared by staff for Board review is not made public, nor is any public consultation undertaken. This process should be revised to allow for public input, in accordance with Ex-Im's environmental assessment procedures and best practices at other US agencies and MDBs.

About NRDC
The Natural Resources Defense Council is an international nonprofit environmental organization with more than 1.4 million members and online activists. Since 1970, our lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, public health, and the environment. NRDC has offices in New York City, Washington, D.C., Los Angeles, San Francisco, Chicago, Montana, and Beijing. For more information, visit www.nrdc.org.

[i] Data compiled by NRDC for a forthcoming report. For coal projects, NRDC broke-out the data between projects that directly supported coal-fired power plants and coal mining projects.
[ii] NRDC will be publishing data on the total coal investments of the major international financial institutions since 2007 in the coming months.
[iii] See: http://www.exim.gov/generalbankpolicies/upload/Draft-Ex-Im-Supplemental-Guidelines-High-Carbon-Intensity-Projects-9-30-2013.pdf
[iv] See: http://www.iea.org/publications/freepublications/publication/TechnologyRoadmapHighEfficiencyLowEmissionsCoalFiredPowerGeneration_Updated.pdf; see also the Kingsworth and Greifswald power plants.
[v] http://www.babcock.com/library/pdf/BR-1852.pdf
[vi] For a full list see: http://switchboard.nrdc.org/blogs/jschmidt/Mitigation%20Commitments.pdf

OILCHANGE
INTERNATIONAL

November 12, 2013

Fred Hochberg
Chairman and President
Export-Import Bank of the United States
811 Vermont Ave., NW
Washington, DC 20571

Re: **Input to the Draft Supplemental Guidelines for High Carbon Intensity Projects**

Dear Chairman Hochberg,

We support President Obama's Climate Action Plan and the U.S. governments' efforts to curb public financing of fossil fuels abroad in order to address climate change. We provide these comments as input to the Export-Import Bank's Draft Supplemental Guidelines for High Carbon Intensity Projects (hereafter "*Draft Supplemental Guidelines*"), which are meant to advance effective Ex-Im Bank implementation of the President's Climate Action Plan.

In summary, the *Draft Supplemental Guidelines* should be amended to:

- **Be consistent with the U.S. EPA recommended Carbon Pollution Standard**
- **Apply restrictions to coal mines and other supporting infrastructure**
- **Account for externalities in the alternatives assessment**
- **Require proof of access for the poor**
- **Specify the most efficient technologies available**
- **Require adequate disclosure and public participation in Ex-Im Bank's project review process**

Be consistent with the U.S. EPA recommended Carbon Pollution Standard - The *Draft Supplemental Guidelines* define "high carbon intensity plants" as plants that use coal as a fuel source, or fossil fuel power generation plants and combined heat and power plants (CHP) that produce greater than 650g CO_2/kWh. To be consistent with the U.S. EPA's proposed *Carbon Pollution Standard for New Power Plants*, the **Supplemental Guidelines' CO_2 emissions threshold for non-coal power plants should be reduced to 454/500g CO_2/kWh (1000/1100 lb CO_2/MWh) for large (> 850 mmBtu/hr) and small (≤ 850 mmBtu/hr) units respectively.**

Apply restrictions to coal mines and other supporting infrastructure – The *Draft Supplemental Guidelines* limit support for new coal mines that are an integral part of new mine mouth generating plants, but do not limit support for new coal mines for non-integrated domestic uses or the export market. While eliminating support for all coal mines would be optimal, Ex-Im should at least be consistent with its stated intentions and restrict eligibility for support to those mine projects that would only sell coal to plants that meet the requirements of the *Supplemental Guidelines*. Under such an approach, Ex-Im would scrutinize the business plan of the mine to determine if its anticipated customers meet its eligibility criteria.

Furthermore, by including integrated mines within the definition of a High Carbon Intensity Projct (HCIP), Ex-Im has properly recognized that support for an HCIP may come in the form of support for the associated infrastructure upon which it depends. Ex-Im should extend this understanding to other critical

associated infrastructure, such as ports and rail links, and transmission and distribution networks. Indeed, Ex-Im already applies this understanding of the scope of a project in its environmental and social due diligence. As a signatory to the Equator Principles, Ex-Im follows IFC's Performance Standard 1, which applies to related facilities that "would not have been constructed or expanded if the project did not exist and without which the project would not be viable."[1] Similarly, Ex-Im should treat such critical associated facilities as integrated with the HCIP and subject to the same eligibility criteria.

Account for externalities in the alternatives assessment – The President's Climate Action Plan specifies that "economic feasibility" must be the benchmark for assessing alternatives. In contrast, the Draft Supplemental Guidelines imply that a comparison of financial cost is acceptable. The distinction between financial and economic analysis in project appraisal is clear and well-established. As the World Bank has explained, "[w]hile financial analysis relies on prices faced by the project's implementing agency, economic analysis is based on opportunity costs to society."[2] As such, the Treasury Department's Coal Guidance includes an economic alternatives analysis that considers whether the selection of an alternative "would result in higher costs of delivering power to end users than the delivered costs of power from the proposed project," and requires that "[r]isk factors and implicit or explicit subsidies, including environmental and health externalities, should also be considered, even if not quantified...." (para. 2.2).

The Supplemental Guidelines should require the alternatives assessment to be based on both internalized costs to the sponsor and on full economic costs and risks of each option, including externalized costs such as fossil fuel subsidies, public health impacts, environmental impacts, and the social cost of carbon.

Require proof of access for the poor: The Draft Supplemental Guidelines currently allow an exemption on financing restrictions for coal plants if the project is located in one of the world's poorest countries and utilizes the most efficient coal technology available and where no other economically feasible alternative exists.

The exemption for the lowest income countries appears intended to support energy access for the poor. On this front, it must be recognized that the International Energy Agency has found that due to the high cost of energy grid extension in poor countries, mini-grid and off-grid renewable energy solutions are the most economically feasible means to bring energy to the majority of people that lack energy access. Meanwhile, large centralized fossil fuel projects can be debt-inducing, further hobbling the economies of low income countries. What's more, when externalities are factored in, coal power is even more costly especially to the poor communities where these large polluting plants are often located. It is not enough to simply be located in the poorest countries because often these large power plants provide no benefits to the poor.

Given these facts, the **Supplemental Guidelines need to require potential projects in the poorest countries to provide clear metrics that establish how many poor will gain access to energy services and by what specific project-based mechanisms**.

Specify the most efficient technologies available – Ex-Im Bank's Draft Guidelines should be consistent with Treasury's *Coal Guidance*, which explicitly requires that projects in the poorest countries that are eligible for support must use "best *internationally* available technologies for reducing GHG emissions" (Para 2.51) (emphasis added). The most efficient coal technologies currently available in the global market

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[1] These include "railways, roads, captive power plants or transmission lines, pipelines, utilities, warehouses, and logistics terminals." IFC, *Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts*, at 4.

[2] World Bank, 1998. *Handbook on Economic Analysis of Investment Operations*, available at: http://siteresources.worldbank.org/INTCDD/Resources/HandbookEA.pdf

are Ultra-supercritical Combustion (USC) and Integrated Gasification Combined Cycle (IGCC). These technologies have been in common use throughout the world for a decade. Subcritical coal technologies are not vital to any project and should not be supported by the Ex-Im Bank.

In order to provide clear guidance, the **Supplemental Guidelines need to specify that USC and IGCC or more advanced (i.e., more efficient) coal technologies can only be eligible for Ex-Im Bank support.**

Increase transparency - Designation of a project proposal as a HCIP triggers an Early Due Diligence Review. Currently, there is no transparency surrounding this review. The current Supplemental Guidelines include a section entitled "Early Due Diligence Review for High Carbon Intensity Power Generation Projects," which requires that an Enhanced Due Diligence Memorandum be prepared by staff and presented to the Board of Directors. This Enhanced Due Diligence Memorandum contains an evaluation of the project's compliance with greenhouse gas-related policy requirements and informs the Board's decision on whether to deny the transaction based on greenhouse gas impacts, or to recommend that Ex-Im Bank staff proceed with a full review of the transaction. Thus, the Board's Early Due Diligence Review decision is one of the most important decision points with regard to climate concerns.

Despite the public interest importance of this early due diligence process, Ex-Im Bank does not publicly disclose the Enhanced Due Diligence Memorandum. What's more, the only advance public notice of Board of Directors' early due diligence decisions is contained in the agenda of pending Board meetings that are posted on the agency's website typically less than one week prior to the meetings. The *Draft Supplemental Guidelines* contain no provisions to remedy this lack of transparency. The Supplemental Guidelines need to require disclosure that is in line with the Pelosi Amendment requirements for MDBs – disclosure of environmental impact assessments (EIA) 120 days prior to Board consideration for projects posing significant environmental impacts. The IFC discloses EIAs 60 days prior to Board consideration for such projects.

To allow the public ample time to fully assess a proposed project's greenhouse gas potential, **the Supplemental Guidelines should require disclosure of the Enhanced Due Diligence Memorandum at least 60 days in advance of the Board of Directors' early due diligence decision for a proposed HCIP.**

Thank you for your consideration of our input on this important initiative.

Sincerely,

Heike Mainhardt
Senior Analyst
Oil Change International

Pacific Environment • Rainforest Action Network • Euronatura • ODG - Debtwatch
The Corner House • Market Forces • Center for International Environmental Law
Both ENDS • Center for Biological Diversity • Friends of the Earth • Amis de la Terre

November 8, 2013

Fred Hochberg
President and Chairman
Export-Import Bank of the United States

Chairman Hochberg,

We write to provide input on the Export-Import Bank's Draft Guidelines for High Carbon Intensity Projects (hereafter "Draft Guidelines").

We welcome U.S. and other governments' efforts to curb fossil fuel financing in order to address climate change, as well as local environmental and community health concerns. We provide these comments in the spirit of promoting the most effective Ex-Im Bank implementation of the President's Climate Action Plan. These comments address the need for the Draft Guidelines to:

- Eliminate Inconsistency with U.S. Emissions Performance Standards
- Include Externalities
- Measure Costs to End Users
- Eliminate the Exceptions
- Broaden the Scope
- Increase Transparency
- Include International Efforts

Eliminate Inconsistency with U.S. Emissions Performance Standards: The Draft Guidelines define "high carbon intensity plants" as plants that use coal as a fuel source, or fossil fuel power generation plants and combined heat and power plants (CHP) that produce greater than 650g CO_2/kWh. The emission performance standard for non-coal power plants should be reduced to 454/500g CO_2/kWh (1000/1100 lb CO2/MWh) for small and large units respectively to be consistent with the U.S. EPA's proposed carbon pollution standard for new power plants.

Include Externalities: Coal and other high carbon intensity projects typically have harmful local and regional impacts and associated costs that are often borne by individuals, communities, and society as a whole, rather than by those who profit from the projects that generate these costs (e.g., power plant owners). Types of externalities include harm to human health, harm to community resources and commons, loss in agricultural productivity, to name a few. Through interagency and international efforts, methodologies to calculate financial costs of these externalities—sometimes referred to as the social cost of carbon—have emerged. These methodologies attempt to estimate financial costs associated with carbon dioxide, as well as other pollutants released simultaneously, such as sulfur dioxide and mercury. While the tragic human toll from this pollution can never carry a price tag, the

existence of social cost of carbon methodologies demonstrates that there is increasingly mainstream awareness of the financial costs that private fossil fuel projects externalize to the public.

Ex-Im Bank's current Supplemental Guidelines for High Carbon Intensity Projects (hereafter "current Guidelines") require an alternatives analysis that takes into consideration current and projected costs associated with CO_2 production, including the social cost of carbon. However, inexplicably, the Draft Guidelines omit any reference to the social cost of carbon and any other externalized costs. In contrast, the Treasury Department's updated 2013 Guidance for U.S. Positions on MDBs Engaging with Developing Countries on Coal-Fired Power Generation (hereafter "Treasury Department's Guidance") requires an alternatives analysis that considers "[r]isk factors and implicit or explicit subsidies, including environmental and health externalities."[1]

Further, the OECD Council's Common Approaches environmental and social policy, which was updated in June 2012, calls upon OECD member export credit agencies, including Ex-Im Bank, to promote coherence between their policies and "international environmental, climate change, social and human rights policies." Thus, the Draft Guidelines' omission of provisions requiring full consideration of the impact on human rights and the environment is inconsistent with the Common Approaches.[2]

Physicians for Social Responsibility and Harvard Medical School have written to you before about the likely human health impacts of coal projects that your agency has financed, including increased respiratory and cardiopulmonary disease and mortality rates, which take a human toll and have financial costs. We have seen no response from you on these vital concerns, which makes the subsequent omission of externalities in the Draft Guidelines all the more disturbing. This compels us to question whether Ex-Im Bank is knowingly ignoring the devastating human health and environmental impacts and the associated externalized costs of the agency's financed projects to poor project-affected communities.

We urge Ex-Im Bank to require the inclusion of environmental, health and other externalities in its economic alternatives analysis. Moreover, Ex-Im Bank should require project sponsors to compensate individuals, communities and governments when externalized costs occur.

Measure Costs to End Users: The Draft Guidelines include a requirement for "[a]n alternatives analysis demonstrating that there are no other economically feasible alternatives to the new high carbon intensity plant." The Draft Guidelines then indicate that this refers to the financial costs of lower carbon intensity alternatives to the buyer, who typically externalizes health and environmental costs, and not to the public, which is typically forced to absorb these externalized costs. In contrast, the Treasury Department's Guidance includes an economic alternatives analysis that considers whether the selection of an alternative "would result in higher costs of delivering power to end users than the delivered costs of power from the proposed project," and says that this analysis should consider "implicit or explicit subsidies, including environmental and health externalities." If the analysis assumes that the true cost of a high carbon intensity project, including environmental and health externalities, is internalized and passed on to end users, it is very likely that many lower carbon alternatives previously deemed to be

[1] Guidance for U.S. Position on MDBs Engaging with Developing Countries on Coal-Fired Power Generation, U.S. Department of Treasury, October 29, 2013, available at http://www.treasury.gov/resource-center/international/development-banks/Documents/CoalGuidance_2013.pdf

[2] Recommendation of the Council on Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence, Section II.3.i

more costly to end users would actually be less expensive. Ex-Im Bank should amend its Draft Guidelines to state that economic alternatives analysis must factor in the cost of environmental and health externalities, and compare that true cost with the cost of alternatives to end users, and to deny financing for any high carbon intensity project with a higher cost to end users.

Eliminate the Exceptions: We see no reasons for the Climate Action Plan and the Draft Guidelines to include exemptions on financing restrictions for high carbon intensity projects that (a) are located in the world's poorest countries that utilize the most efficient coal technology available and where no other economically feasible alternative exists, or (b) deploy carbon capture and sequestration, in each case, in accordance with the requirements set forth in these [Draft Guidelines].

The exemption for the lowest income countries appears intended to support energy access for the poor, yet will likely have the opposite effect. The International Energy Agency has found that due to the high cost of energy grid extension in poor countries, mini-grid and off-grid renewable energy solutions are now the most economically feasible means to bring energy to the majority of people who lack energy access. Meanwhile, large centralized fossil fuel projects financed by export credit agencies can be very debt-inducing, further hobbling the economies of low income countries. What's more, when other variables, including environmental and health externalities, are factored in, coal power is more expensive still. If the least expensive way to bring energy access to the world's poorest people is with clean, distributed, renewable energy, why should poor countries pay more for polluting coal technologies that increase national debt?

The Draft Guidelines' exception for projects that deploy carbon capture and storage (CCS) is equally unnecessary. CCS is still in the demonstration phase globally and has not proven to be environmentally or economically viable at scale. Systems to capture, transport, compress and inject CO_2 can dramatically increase the price per kWh of power generated over a project's lifecycle, and they can create unacceptable risks and liabilities for project sponsors, financiers, governments and the environment. Further, CCS is highly unrealistic as an option for delivering carbon emission reductions at the scale and in the timeframe necessary to avert catastrophic climate change. Even if, theoretically, CCS were to become feasible, its widespread use would facilitate the perpetuation of fossil fuel combustion on a massive scale, with all the attendant adverse health and environmental impacts, including respiratory and cardiovascular system damage, cancer, and death, along with air and water pollution.

We also oppose the inclusion of the reference to "CCS ready" in the Draft Guidelines. In 2011, when Ex-Im Bank approved financing for the controversial Kusile coal-fired power plant in South Africa, the agency attempted to justify its decision based in part on its claim that the plant is CCS ready,[3] yet the agency did not say whether eventual CCS deployment would be required. Hence, Ex-Im Bank's claim that Kusile is "CCS ready" creates a false hope of future action to justify support for a project that should not have been financed.

Given the Kusile example, we are further troubled by the Draft Guidelines provision allowing for the CCS system to be "fully functional within one year of a new plant's initial operation, or within one year of the completion of an upgrade or retrofit to an existing plant." The President's Climate Action Plan only acknowledges exemptions for "facilities *deploying* carbon capture and sequestration technologies,"

[3] Ex-Im Bank Provides Preliminary Approval for $805 Million in Financing for Kusile Power Plant in South Africa, Ex-Im Bank press release, April 14, 2011, available at http://www.exim.gov/newsandevents/releases/2011/ex-im-board-provides-preliminary-approval-for-805-million-in-financing-for-kusile-power-plant-in-south-africa.cfm

indicating that projects must have an operational CCS system in order to receive funding. And, Ex-Im Bank has rarely, if ever, withdrawn financing after approval due to non-compliance with the agency's environmental policy; hence, the one-year extension, combined with the reference to CCS ready, could be considered a compliance loophole by project applicants. Therefore, this provision should be eliminated.

Broaden the Scope: Firstly, the scope of the Draft Guidelines should include an explicit ban on financing for exports to all coal mines and associated infrastructure (e.g., rail corridors, ports), and not just mine-mouth coal facilities. The President's Climate Action Plan restriction on financing of coal plants abroad seeks to address the harm to the climate caused by these plants. Coal mines and associated infrastructure are crucial to the delivery of the raw materials that enable coal plants to operate, thus they directly contribute to the harm that the Climate Action Plan seeks to address. This is true of mines and associated infrastructure for the controversial Alpha coal project in Australia, which Ex-Im Bank is reportedly considering for financing.

By analogy, the U.S. Government has determined that illicit drugs cause harm to society, and therefore agencies enact policies to thwart the flow of these drugs every step of the way from the original source to the ultimate destination. The Draft Guidelines' restriction of financing for coal plants and not for coal mines and associated infrastructure is akin to a policy that prohibits illicit drug consumption while financing its cultivation.

Secondly, the scope of the Draft Guidelines should be expanded to account for lifecycle greenhouse gas emissions of high carbon intensity projects. Various Draft Guidelines provisions are triggered by specified levels of direct project emissions. However, many fossil fuel projects financed by Ex-Im Bank contribute to far greater lifecycle emissions than these direct emissions reflect. Scientists at Carnegie Mellon University studied LNG lifecycle emissions ranging from production, processing, liquefaction, tanker transport, gasification, transmission and storage, distribution and consumption, which, when combined, approach lifecycle emissions of some coal power plants.[4] This is relevant for Ex-Im Bank because in recent years the agency has financed several LNG projects with lifecycle carbon intensity far greater these projects' direct emissions reflect. We note that the Treasury Department's Guidance requires public documentation to enable the Board and external stakeholders to know "the results of calculations of lifecycle GHG emissions from the proposed project and from any offsetting actions." Therefore, the Draft Guidelines provisions should be recalculated to account for and to incorporate lifecycle greenhouse gas emissions.

Increase Transparency: Both the Draft Guidelines and the current Guidelines lack transparency requirements that are necessary to protect the public interest. For example, the current Guidelines include a section entitled "Early Due Diligence Review for High Carbon Intensity Power Generation Projects," which requires that an Enhanced Due Diligence Memorandum be prepared by staff and presented to the Board of Directors. This Enhanced Due Diligence Memorandum contains an evaluation of the project's compliance with greenhouse gas-related policy requirements and informs the Board's decision on whether to deny the transaction based on greenhouse gas impacts, or to recommend that Ex-Im Bank staff proceed with a full review of the transaction. Thus, the Board's Early Due Diligence Review decision is one of the most important decision points with regard to climate concerns. Despite

[4] Comparative Lifecycles Carbon Emissions of LNG Versus Coal and Gas for Electricity Generation, Jaramillo, Griffin & Matthews, Carnegie Mellon University, available at http://www.ce.cmu.edu/~gdrg/readings/2005/10/12/Jaramillo_LifeCycleCarbonEmissionsFromLNG.pdf

the public interest importance of this early due diligence process, Ex-Im Bank does not publicly disclose the Enhanced Due Diligence Memorandum. What's more, the only advance public notice of Board of Directors' early due diligence decisions is contained in the agenda of pending Board meetings that are posted on the agency's website typically less than one week prior to the meetings. The Draft Guidelines contain no provisions to remedy these problems.

We value an early due diligence process that allows the agency to rule out projects that are ineligible for Ex-Im Bank support before additional agency resources are unnecessarily spent. However, with the absence of public disclosure of the Enhanced Due Diligence Memorandum, and with notice of a pending early due diligence decision posted less than one week prior to the decision, the public is provided neither information to judge the veracity of the agency's early due diligence decision nor an opportunity to provide timely input to inform that decision.

Following the Board of Directors' previous early due diligence decisions, Pacific Environment filed Freedom of Information Act requests for Enhanced Due Diligence Memoranda and received responsive documents containing extensive sections of these Memoranda. This demonstrates Ex-Im Bank's recognition that public disclosure of this information is legally required. Environmental groups' review of these disclosed documents has revealed incomplete and misleading information, as well as information indicating violations of the agency's environmental policy, which environmental groups would have brought to the Board of Directors' attention prior to early due diligence decisions. Thus, the absence of public disclosure of Enhanced Due Diligence Memoranda before the Board's decision precludes the early due diligence process from fully achieving its otherwise important purpose.

In contrast, Ex-Im Bank's Environmental and Social Due Diligence Procedures require public disclosure of Environmental and Social Impact Assessments for a minimum of 30 days prior to any Bank approval of financing for projects. The public disclosure of information required of applicants under the Draft Guidelines is no less necessary for the agency to make informed decisions in a transparent manner. We note that the Treasury Department's Guidance calls for "sufficient public documentation on the steps followed with respect to the processes [to enable] external stakeholders to understand the decisions resulting in the proposed project." Therefore, Ex-Im Bank's Draft Guidelines should be amended to mandate that related information generated by applicants and the agency shall be publicly disclosed for a sufficient minimum number of days prior to any agency early due diligence decision.

Meanwhile, the Draft Guidelines appear to eliminate the early enhanced due diligence process described above altogether, suggesting that compliance with the Draft Guidelines requirements will instead be determined later, in the subsequent full environmental and social impact assessment process. If Ex-Im Bank decided to eliminate the early due diligence process, the agency should mandate that information that is required to be generated by applicants and the agency in order to demonstrate compliance with the Draft Guidelines be publicly disclosed along with other environmental and social impact assessment documents, and disclosed a sufficient number of days prior to any other Board action to approve financing. We note that Ex-Im Bank evaluates projects against international environmental guidelines such as those of the World Bank Group, particularly IFC, which provide 120 days and 60 day comment periods, respectively, for Category A projects, before Board approval.

Include International efforts: The Climate Action Plan obligates the U.S. Government to "work actively to secure the agreement of other countries and the multilateral development banks to adopt similar policies as soon as possible." This should include active work focusing on both OECD and non-OECD countries. We appreciate efforts taken by Ex-Im Bank staff and other agencies to promote coal and

other fossil fuel restrictions abroad. However, we note that there is no commitment in the Draft Guidelines for Ex-Im Bank to work actively to achieve any such agreement. This omission is in violation of the *FOE v. Spinelli* lawsuit settlement agreement, which compels Ex-Im Bank to play a leadership role in the promotion of climate change considerations by other export credit agencies. Equally troubling, we have not yet seen you, as Chairman, show leadership abroad on climate issues, which is quite in contrast to your many international trips to promote fossil fuel-related exports. We seek your renewed commitment to fulfill President Obama's Climate Action Plan pledge to promote progress abroad, to comply with the *FOE v. Spinelli* settlement agreement, and to otherwise take the severity of climate change more seriously.

Sincerely,

Doug Norlen
Pacific Environment
United States

Amanda Starbuck
Rainforest Action Network
United States

Alba Valle
Euronatura
Portugal

Monica Vargas
Observatorio de la Deuda en la Globalización
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Wiert Wiertsema
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Sarah Uhlemann
Center for Biological Diversity
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Karen Orenstein
Friends of the Earth
United States

Nick Hildyard
The Corner House
United Kingdom

Niranjali Amerasinghe
Center for International Environmental Law
United States

Julien Vincent
Market Forces
Australia

Lucie Pinson
Amis de la Terre
France

[COMMENTS FROM RICHARD W. KNOEBEL, SARGENT & LUNDY]

Draft Annex A2 Comments

1. Paragraph I.a – Applicability. A) Does this paragraph mean that the Guidelines apply over the life of the project; or do they apply to all current past and future projects already financed by Ex-Im Bank? Sargent & Lundy would assume that this paragraph means that the Guidelines are applicable through the life-cycle of any Ex-Im Bank financed-projects for which the final application was received after the Ex-Im Bank date of adoption of the Guidelines.

2. Paragraph I.b.ii – HCIP Definition. I don't understand what types of facilities this paragraph applies to, other than plants already captured in paragraphs i, iii, and iv.

3. Paragraphs I.b.iii and iv – HCIP Definition, Emissions Threshold. A) Please clarify if the threshold is 650 g-CO2/kWh (net output) or 650 g-CO2/kWh (gross output). The phrase "generated electricity" seems to imply gross output. B) It is our expectation that the threshold will be triggered by essentially all coal-fired power plants, including ultra-supercritical and IGCC plants, and fuel-oil fired boilers, but will not be triggered by any gas-fired power plants, including simple-cycle combustion turbine plants and gas-fired engine plants. It is our concern that some fuel-oil fired diesel engine plants, both simple cycle and combine cycle, may trigger the HCIP definition.

4. Paragraph I.c.iii. – Exceptions. A) Does this paragraph cover routine maintenance and repair work, as well as upgrade and retrofits? Or is that what is meant by upgrades and retrofits? B). This paragraph is fine in principle, but may be difficult to implement in practice. Experience with similar ... in U.S. environmental regulations ... difficult to distinguish between "routine maintenance work" and "life-extension work". For example, applications have been approved by state regulatory agencies for certain amounts of boiler retubing, cyclone replacements and similar under the idea that this type of work IS routine within the 30-year plus life cycle of a boiler. C) Regarding "not increase the capacity", please clarify if this is the maximum short-term (e.g. hourly) capacity of the unit or does it apply to the long term (e.g. annual) capacity of the unit? D) In the case of a boiler unit project, does the phrase "not increase the capacity" apply to maximum steam production or maximum electric production, either gross or net? For example, some turbine-generator projects can increase the electric output by improving the turbine efficiency, without requiring any changes to the boiler, fuel consumption, or emissions.

5. Paragraphs II.a.i-iv – Information Submittal Requirements. It is Sargent & Lundy's opinion that these information submittal and analysis requirements will require novel technological and financial analysis for most developing countries.

6. Paragraph II.b – CCS Requirements. Do the information submittal requirement of paragraphs II.a.i-iv meant to apply to high carbon intensity plants proposed for construction outside of the World's Poorest Countries?

7. Paragraph II.b – CCS Requirement. Sargent & Lundy has strong concerns regarding the commercial, legal and financial availability of CCS for coal-fired plants, particularly in developing countries.

8. Paragraph II.b – CCS Guideline. Please clarify if the emission guideline for CCS is 500 g-CO2/kWh (net output) or 500 g-CO2/kWh (gross output). It is our expectation that this guideline would require 30% to 50% carbon capture for most coal-fired power plants. We would appreciate your confirmation that this is consistent with Ex-Im Bank's analysis.

November 8, 2013

Fred Hochberg
Chairman and President
Export-Import Bank of the United States
811 Vermont Ave., NW
Washington, DC 20571

Re: Comments on the *Draft Supplemental Guidelines for High Carbon Intensity Projects*

Dear Chairman Hochberg,

We have strongly supported the President's call in his Climate Action Plan to severely restrict U.S. government support for public financing of new coal projects overseas.

We are writing now to offer our views on how Ex-Im should implement the President's directive in its *Supplemental Guidelines for High Carbon Intensity Projects*. In addition to providing narrative comments, we have attached an Appendix that proposes specific textual edits to the *Draft Supplemental Guidelines*.

We think the revised guidelines should achieve two overarching objectives: (a) implement the President's directive in a rigorous and transparent manner; and (b) ensure that Ex-Im's policies are consistent with the approach adopted by other U.S. government departments and agencies, particularly the Department of Treasury's revised *Guidance to MDBs for Engaging with Developing Countries on Coal-Fired Generation* (*Coal Guidance*) and the Environmental Protection Agency's *Proposed Carbon Pollution Standard for New Power Plants (Carbon Pollution Standard)*.

Towards this end, we offer the following recommendations:

Definition of "High Carbon Intensive Plants" (HCIPs)

1. Ex-Im properly includes all coal plants, any portion of an integrated mine-mouth plant, and life-extension retrofits of coal plants within the definition of HCIPs, and rightly excludes the renewable portion of a hybrid plant from this definition.

Sections I(b)(i) and (ii) define HCIPs to include all plants that use coal as a source of fuel and any portion of an integrated mine mouth plant, including the coal mine. These parts of the definition are sufficiently broad and clear, and we support them.

In addition, Section I(c)(iii) properly includes retrofits or upgrades that will extend the useful life of a facility or increase its capacity within the definition of HCIPs. We support this approach. We also think that this section includes reasonable examples to highlight the distinction: sulfur dioxide scrubbers may be supported without restriction, but new generators or boiler re-tubing projects may not.

Section I(c)(ii) also includes a reasonable distinction with respect to hybrid plants that, for example, combine a HCIP and a solar booster. Under this section, only the renewable portion of such a facility (the solar booster) may be supported without restriction.

2. In addition to integrated mines, Ex-Im should define HCIPs to include other critical associated facilities, in accordance with its due diligence under the Equator Principles.

By including integrated mines within the definition of an HCIP, Ex-Im has properly recognized that support for an HCIP may come in the form of support for the associated infrastructure upon which it depends. Ex-Im should extend this understanding to other critical associated infrastructure, such as ports and rail links, and transmission and distribution networks. Indeed, Ex-Im already applies this understanding of the scope of a project in its environmental and social due diligence. As a signatory to the Equator Principles, Ex-Im follows IFC's Performance Standard 1, which applies to related facilities that "would not have been constructed or expanded if the project did not exist and without which the project would not be viable."[1] Similarly, Ex-Im should treat such critical associated facilities as integrated with the HCIP and subject to the same eligibility criteria.

3. Ex-Im should adopt EPA's proposed* Carbon Pollution Standard for New Power Plants *as the threshold for the definition of "High Carbon Intensity Plants".

Section I(b)(iii) and (iv) also define electric generating units, combined heat and power (CHP), and heating plants that use fossil fuels other than coal as HCIPs if their direct GHG emissions will equal or exceed 650g CO_2/kWh (1,494lb CO_2/MWh).[2] To promote consistency across U.S. Government agencies, Ex-Im should bring its HCIP threshold for units that fire fossil fuels other than coal into alignment with EPA's proposed *Carbon Pollution Standard for New Power Plants*

[1] These include "railways, roads, captive power plants or transmission lines, pipelines, utilities, warehouses, and logistics terminals." IFC, *Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts*, at 4.

[2] For CHP plants, the kWh "equivalent" is employed.

of 454/500g CO_2/kWh (1000/1100 lb CO_2/MWh) for small and large units respectively, on an interim basis. Upon completion of EPA's rulemaking, Ex-Im should apply the final NSPS threshold.[3]

EPA is the lead federal agency with respect to these issues. Its proposed standard was developed in consultation with other federal agencies and represents the Administration's best scientific and technical judgment concerning the capabilities to be expected of new gas and oil-fired generation. As such, Ex-Im should adopt its determination on these issues as the HCIP threshold, absent compelling reasons to adopt a different standard. The *Supplemental Guidelines* should be consistent with EPA's final rule for these units, and new units not meeting the EPA's threshold should be considered HCIP.

We agree that, if the calculation is done properly, adopting a similar threshold for CHP units will address the potential CHP slipstream issue that we discussed in the Ex-Im public meeting.

"Most Efficient Coal Technology Available in the World's Poorest Countries"

4. Ex-Im should apply the CAP's "most efficient coal technology available in the world's poorest countries" requirement, rather than the proposed "best appropriate technology available in the country where the plant is located" test.

The CAP requires eligible projects to use "the most efficient coal technology available in the world's poorest countries...." Section II(a)(i), however, interprets this provision to allow Ex-Im to support projects that employ the "best *appropriate* technology available in the country where the plant is located..." We are concerned that this standard (a) is weaker than the CAP's requirements; (b) is ambiguous and may unduly lower expectations for buyers; and (c) fails to account for the global nature of the marketplace of critical goods and services for coal plants. Accordingly, it should be dropped in favor of the CAP formulation.

First, Section II(a)(i)'s "best appropriate technology" language seems to imply that in some circumstances, the "most efficient technology" would not be appropriate for a proposed project, and therefore would not be required, even if it was available in the country and was economically feasible. "Best Appropriate Technology" is likely to be interpreted to mean "Best Available Techniques," as applied in European Union countries. This term is commonly applied in the EU to allow a broad range of control device efficiencies depending on the policy preferences of the country in which the unit is to be installed and is ordinarily applied using a cost test, which, in certain countries may be quite lax. In contrast, the CAP requires that the most efficient technology be employed unless it is economically infeasible – a much higher bar, and one that is to be determined by the federal lending agency, not the host country. Ex-Im has not provided any sound basis for watering down the clear language of the CAP to a term that is either poorly understood or understood to permit less than the most efficient technology.

Second, Section II(a)(i) further limits the CAP by providing that projects need only use the best technology "*available in the country where the plant is located...*" (emphasis added), rather than the CAP's requirement that projects use the most efficient coal technologies available

[3] http://www2.epa.gov/sites/production/files/2013-09/documents/20130920proposal.pdf

collectively in "*the world's poorest countries*." We are concerned that Section II(a)(i)'s reference to the host country may create an undue expectation on the part of bidders that Ex-Im will simply apply domestic regulatory standards—however weak they may be. This reading would not be consistent with the intent of the CAP to apply a stringent, consistent, beyond "business as usual" technology test. Thus, it is important that Ex-Im put bidders on clear notice that it will apply the CAP's "most efficient technology" requirement rigorously and uniformly. Ambiguity, on the other hand, will, over the long term, harm relations with bidders and host countries that invest time and resources on proposals that ultimately will not be approved. For these reasons, the Ex-Im's policy should not derogate from the CAP language.

Third, we are concerned that looking only at the best appropriate technology available in the host country fails to account for the nature of the global market for the critical inputs for a coal facility. Because the relevant equipment is produced by just a few companies worldwide, the technologies that are "available" in the world's poorest countries are the same as those that are available anywhere else. Similarly, because the expertise necessary to design, build and operate a new facility also resides largely outside of the "world's poorest countries," foreign engineers and technicians will be necessary regardless of which technology is employed. Often, this expertise will be supplied by the manufacturer of the critical components. Accordingly, the lack of domestic infrastructure or expertise to build or maintain a SC/USCPC and lignite dryer should not be a consideration in determining what technology is "available."

To properly account for these market dynamics, Ex-Im's *Supplemental Guidelines* should follow Treasury's *Coal Guidance*, which explicitly requires that projects use "best *internationally* available technologies for reducing GHG emissions" (Para 2.51) (emphasis added).

5. Ex-Im should specify the most efficient coal technologies that it is willing to support.

Just as the *Draft Supplemental Guidelines* lists the "poorest countries" in which unabated coal plants could be supported (Attachment 1), they should also specify which technologies could be eligible for support under the CAP's requirements.

The most efficient coal technologies currently available in the global market are Advanced or Ultra-supercritical Combustion ("USC") and Integrated Gasification Combined Cycle ("IGCC"). These technologies have been in common use throughout the world for a decade,[4] and produce about 20-30 percent less greenhouse gas emissions per kilowatt hour than a new subcritical plant. Even more efficient Advanced Ultra-supercritical designs should be commercially available in the next few years.[5] In addition, supplemental technologies, such as coal drying using waste heat or renewable energy, can further improve efficiency and should be required where applicable.

Subcritical pulverized coal ("PC"), supercritical pulverized coal ("SC") and subcritical circulating fluidized bed ("CFB") designs not delivering the efficiencies of more advanced technologies are never essential to the nature of a project and should not be eligible for Ex-Im

[4] See: http://www.iea.org/publications/freepublications/publication/TechnologyRoadmapHighEfficiencyLowEmissionsCoalFiredPowerGeneration_Updated.pdf; see also the Kingsworth and Greifswald power plants.
[5] http://www.babcock.com/library/pdf/BR-1852.pdf

support.[6] The added cost for USC plants is not relevant to a determination as to whether the technology is "available" and, in any event, the fuel savings provided by these technologies ordinarily offsets any increased capital cost.

Alternatives Assessment

6. Ex-Im should make clear that proponents must carry a heavy burden to demonstrate that there are no economically feasible alternatives to the proposed HCIP.

Section II(a)(ii) properly requires "[a]n alternatives assessment demonstrating that there are no economically feasible alternatives to the new high carbon intensity plant." Consistent with the CAP, this formulation correctly presumes that alternatives to HCIP will ordinarily be available, and places the burden on the project sponsor to demonstrate that "no other economically feasible alternative exists."

In keeping with the President's call for "an end to U.S. government support" for new coal plants overseas, Section II(a)(ii) should make clear that project sponsors must carry a heavy burden to prove that no economically feasible alternative exists. Given the rapidly falling costs of renewables, the ubiquity of very low cost end-use efficiency options, and the range of effective policy tools that are available, Ex-Im should view such claims with skepticism.[7] For example, applying a similar test, the World Bank has committed to only support new coal projects in "rare circumstances."

7. Ex-Im should broaden the list of alternatives that must be considered to include proven, best-practice options such as grid upgrades and demand side reductions.

The analysis described in Section II(a)(ii) leaves out important alternatives to HCIPs. While it properly notes that consideration should be afforded to renewable energy or cleaner fossil fuels that may displace the need for the power generated by the HCIP, it makes no mention of the most likely alternative to a HCIP—low-cost efficiency improvements. In many developing countries, upgrading the transmission and distribution system, insulating buildings, modernizing lighting, and otherwise reducing demand often will be feasible alternatives to HCIPs and should be evaluated. Treasury's new *Coal Guidance*, for example, specifies that demand side management approaches must be considered. (para. 2.1). Section II(a)(ii) also fails to recognize policy changes that can displace demand or fundamentally alter the alternatives calculus (such as elimination of fossil fuel subsidies). These omissions should be rectified in the final policy.

8. Ex-Im should eliminate language that weakens the CAP's requirement that "no other economically feasible alternative exists."

Section II(a)(ii)'s approach to determining whether "no other economically feasible alternative exists" is weaker than the CAP requires in three important respects:

[6] These technologies can be employed when combusting lignite, with somewhat higher emission rates.
[7] For example, if intermittency of renewable alternatives is cited as a feasibility concern, the proponent must also show that the measures that have been employed throughout the world to address this issue are infeasible in the particular case.

First, while the President's directive specifies that "economic feasibility" must be the benchmark for assessing alternatives, Section II(a)(ii) implies that a comparison of financial cost is acceptable. The distinction between financial and economic analysis in project appraisal is clear and well-established. As the World Bank has explained, "[w]hile financial analysis relies on prices faced by the project's implementing agency, economic analysis is based on opportunity costs to society." [8] Treasury has recognized this distinction, and integrates economic concerns into its *Coal Guidance* by requiring that "[r]isk factors and implicit or explicit subsidies, including environmental and health externalities, should also be considered, even if not quantified...." (para. 2.2).

To satisfy the CAP's requirements of an economic analysis, the alternatives analysis should not be based solely on internalized costs to the sponsor, but rather on the full economic costs and risks of each option, including externalized costs such as fossil fuel subsidies, public health impacts, environmental impacts, and the social cost of carbon. Discount rates appropriate to public policy decisions, rather than those used for investment analyses, should be employed.

With regard to the social cost of carbon, we note that the existing policy requires that buyers consider this cost in their alternatives assessment.[9] The elimination of this requirement is difficult to understand, given that the overall costs of carbon emissions are the critical motivator for the CAP. It should be restored.

The alternatives assessment should incorporate a process similar to EPA's "top down BACT process" for identifying and evaluating alternate technologies. Using this process, the country's energy needs would be identified and the lowest emitting solution prioritized. Only if the lowest emitting solution is so expensive as to be impossible to implement would the next higher emitting solution be considered. The test is the overall, long-term impact of the full economic cost of energy on the economy - not the incremental cost when compared to coal.

Second, while Section II(a)(ii) does not explain how "feasibility" will be assessed, it implies that Ex-Im will look primarily at whether alternatives have lower financial costs. But "feasible" means "capable of being done or carried out "feasibility"—it is not the same as "least cost."[10] Options with incremental costs may still be feasible. Recognizing this distinction, Treasury's *Coal Guidance* makes clear that while technologies eligible for support must be feasible and available, they are "not necessarily least market cost." (para. 2.1, fnt 2). Ex-Im should employ a similar approach, and adopt a feasibility test that limits coal funding to situations where the lower carbon alternatives are so much more expensive in terms of total social cost than the proposed project as to be impossible to implement.

Third, while the CAP requires buyers to show that "no other economically feasible alternative exists," Section II(a)(ii) requires them to only consider alternatives that are "available to the

[8] World Bank, 1998. *Handbook on Economic Analysis of Investment Operations*, available at http://siteresources.worldbank.org/INTCDD/Resources/HandbookEA.pdf

[9] http://www.exim.gov/generalbankpolicies/environment/ENVIRONMENTAL-AND-SOCIAL-GUIDELINES.cfm#annexA-2

[10] www.merriam-webster.com/dictionary/feasible

buyer." Since economically feasible alternatives are likely to exist outside of the business model or corporate priorities of the buyer, this restriction would significantly narrow the requirements of the CAP. In particular, it may preclude consideration of options such as grid upgrades and demand reduction initiatives that may be outside the purview of the buyer. Section II(a)(ii) should explicitly preclude support for a coal plant unless a comprehensive alternatives assessment demonstrates that all low-carbon options, including demand side reduction efforts, grid improvements, and policy interventions are not "economically feasible".

Definition of CCS Deployment

9. Ex-Im should address gaps and inconsistencies in its CCS requirements.

Under the CAP, coal projects outside of the world's poorest countries must deploy carbon capture and sequestration technologies (CCS) to be eligible for support. Section II(b) addresses this issue by requiring that CCS must be deployed within one year of project completion and must reduce emissions to 500g CO_2/kWh (1100 lb/MWh).

However, Section II(b) is inconsistent in how it applies this requirement. It generally requires that the CCS system *must* reduce emissions to 500g CO_2/kWh, but with regard to Integrated Gasification Combined Cycle (IGCC) units, it provides only that such units *should* reduce emissions to this level. This level of performance should be required in all cases.

In addition, for most CCS systems, Section II(b) requires that captured CO_2 be transported to an "environmentally safe and permanent geological storage" site. This requirement, however, does not appear to apply to CCS from IGCC units. This anomaly should be corrected.

Finally, Section II(b) provides no indication of how Ex-Im will ensure that the integrity of the sequestration is maintained over time, or that the use of CCS will not exacerbate local air quality and other environmental impacts. These oversights should also be corrected.

Consistency with Low Carbon Growth Plans

10. Ex-Im should clarify that HCIPs must be consistent with any low-carbon growth plan that the host country has developed.

Section II(a)(iv) properly recognizes that coherence with national low-carbon growth plans should be a consideration in evaluating a proposed HCIP. However, it does not require that a poor host country actually have a low carbon growth plan. And if a host country does have a low-carbon growth plan, Section II(a)(iv) does not require that the HCIP be consistent with that plan. Instead, it requires only that the developer provide "information demonstrating *the extent to which* the [HCIP] will align with the objectives of any applicable low carbon growth plans of the country where it is located, ..." (emphasis added)

Taken literally, this requirement could be satisfied by a statement that the HCIP does not align with the objective of the host country's low carbon growth plan at all. To avoid such an anomalous result, Ex-Im should simply revert to the language in Section 1(d) of the current

Supplemental Guidelines, which provides that, "Information shall be provided evidencing that the Project will align with the objectives of the host country low carbon growth plans or strategies, if any."

New Coal Mines

11. Ex-Im should adopt restrictions on support for new coal mines.

The *Draft Supplemental Guidelines* limit support for new coal mines that are an integral part of new mine mouth generating plants, but do not limit support for new coal mines for non-integrated domestic uses or the export market. We think this is an area in which Ex-Im should demonstrate leadership among peer financing institutions, and move beyond the narrow requirements of the CAP.

While eliminating support for all coal mines would be optimal, a reasonable approach for Ex-Im would be to restrict eligibility for support to those mine projects that will sell coal predominantly (if not exclusively) to HCIPs that would be eligible for Ex-Im support under the *Supplemental Guidelines*. Under such an approach, Ex-Im would scrutinize the business plan of the mine to determine if its anticipated customers meet its eligibility criteria.

Retention of Consultants

12. To avoid conflict of interest, Ex-Im should clarify that Ex-Im, not its client, will select and retain the Independent Consultant.

Section III provides that "[t]he Engineering & Environment Division of Ex-Im Bank may require the engagement of an independent consultant on behalf of Ex-Im Bank, at the expense of the buyer...." We welcome this additional requirement, as outside expertise can help Ex-Im ensure that the *Supplemental Guidelines* are applied in a rigorous fashion, and in accordance with evolving best practices. However, Section III is unclear as to whether Ex-Im will select and retain an independent consultant and bill the buyer for the cost, or the buyer will select a consultant that it makes available to Bank staff. Section III should be revised to clarify that Ex-Im will retain the consultant to avoid a potential conflict of interest on the part of the consultant.

List of the Poorest Countries

13. In accordance with the CAP, only the poorest countries, not those with poor credit ratings, should be eligible to host HCIPs without CCS.

The *Draft Supplemental Guidelines* include Attachment 1, which lists the "poorest countries" where support for HCIP is potentially available. According to Attachment 1, this list has been generated by the World Bank, and is comprised of countries designated by the World Bank as being among the world's poorest countries based on (i) gross national income per capita, or (ii) "in certain cases, the country's limited capacity to access credit from external sources."

We support the idea of publishing a specific list of the "world's poorest countries," and agree that the list should be generated based on objective criteria. Toward this end, we agree that the IDA list of "poorest countries" is an objective and credible list of the countries that should fall under the exception of the CAP. However, some countries that are not among the "world poorest" are allowed to access IDA because of their poor credit ratings. Such countries do not meet the requirements of the CAP, which does not allow for funding of HCIP projects based on poor credit rating. Countries that are eligible for IDA support due to their low credit rating should not be considered among the "world's poorest countries" under the *Supplemental Guidelines*.

Transparency

14. The Enhanced Due Diligence Memorandum should be made available for public comment.

Designation of a project proposal as a HCIP triggers an enhanced due diligence review. Currently, there is no transparency of this review. The Enhanced Due Diligence Memorandum prepared by staff for Board review is not made public, nor is any public consultation undertaken. This process should be revised to allow for public input, in accordance with Ex-Im's environmental assessment procedures and best practices at other US agencies and MDBs.

Thank you for your willingness to consider our input on this important and welcome initiative.

Sincerely,

Bruce Buckheit
Consultant, Sierra Club[11]

Steven Herz
Senior Attorney, Sierra Club
steve.herz@sierraclub.org

cc: James A. Mahoney, Vice President, Engineering And Environment

[11] Mr. Buckheit is an independent energy consultant. He is the former Director of the Air Enforcement Division, USEPA and a former member of the Virginia Air Pollution Control Board. He has been involved in analysis and policy formulation concerning domestic and foreign coal-fired power plants for over 20 years.

APPENDIX

ANNEX A-2
SUPPLEMENTAL GUIDELINES FOR HIGH CARBON INTENSITY PROJECTS

Under Ex-Im Bank's environmental policy, the Bank will not provide support for exports for high carbon intensity plants, except for high carbon intensity plants that (a) are located in the world's poorest countries that utilize the most efficient coal technology available and where no other economically feasible alternative exists, or (b) deploy carbon capture and sequestration, in each case, in accordance with the requirements set forth in these Supplemental Guidelines. In accordance with these requirements, Ex-Im anticipates that it will provide support for high carbon intensity plants only in rare circumstances.

Comment [S1]: See discussion in section 6.

I. Scope of Supplemental Guidelines

a. The Supplemental Guidelines set forth in this Annex apply to all final applications for financing that cover exports for high carbon intensity plants and coal mines that serve such plants (as defined below) for which construction is planned, which are undergoing construction, or which have entered into operation.

Comment [S2]: See discussion in section 11.

b. "High carbon intensity plants" are defined as:

i. Plants that use coal as a source of fuel; or

ii. Any portion of an integrated mine-mouth coal power (and/or heat) generation plant, *i.e.*, exports to either the coal mine portion and/or to the power plant portion of the integrated mine-mouth plant; or

iii. Fossil fuel power generation plants that produce or are expected to produce direct greenhouse gas (GHG) emissions equivalent to a level greater than 454-500[12] ~~650~~ grams of carbon dioxide per kilowatt-hour of generated electricity (grams CO2/kWh) equivalent; or

Comment [S3]: See discussion in section 3.

iv. Combined heat and power (CHP) plants and/or heating plants that produce or are expected to produce direct GHG emissions equivalent to a level greater than 454-500[13] ~~650~~ grams CO2/kWh equivalent.

Comment [S4]: See discussion in section 3.

c. Infrastructure associated with the plants described in section b that would not have been constructed or expanded if the plant did not exist and without which the plant would not be viable, will be considered to be part of the plant for purposes of these Guidelines.[14]

Comment [S5]: See discussion in section 2.

d. These Supplemental Guidelines also apply to coal mines that serve high carbon intensity plants.

Comment [S6]: See discussion in section 11.

[12] In accordance with EPA's final *Carbon Pollution Standard for New Power Plants*.
[13] In accordance with EPA's final *Carbon Pollution Standard for New Power Plants*.
[14] These include "railways, roads, captive power plants or transmission lines, pipelines, utilities, warehouses, and logistics terminals." IFC, *Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts*, at 4.

e. These Supplemental Guidelines do not apply to:

i. Applications for financing covering exports to projects (including industrial, manufacturing, natural resource extraction, chemical, refinery or material processing projects) that use the output (heat or electric power) produced (or to be produced) by a high carbon intensity plant, to the extent that no Ex-Im Bank financing is used to cover exports or local goods or services to the project's high carbon intensity plant, *i.e.*, financing must cover only exports or local goods or services that are exclusively for the downstream part of the project, and no financing is used to cover exports to the power (or heat) generation part of the project; or

ii. Applications for financing covering certain exports to hybrid plants which use two generation sources, a high carbon intensity source and a renewable energy source, or plants using "solar boost" techniques where the exports financed are used exclusively for the renewable energy portion of the plant, and to the extent that no financing is used to cover exports or local goods or services to any part of the project's high carbon intensity source; or

iii. Applications for financing covering exports to upgrade or retrofit existing high carbon intensity plants where the upgrade or retrofit to the plant does not increase the capacity of the plants and/or extend its useful life, *e.g.*, exports for equipment such as sulfur dioxide scrubbers or switchgear replacement, but not for a new turbine generator or boiler re-tubing.

II. Supplemental Guidelines for High Carbon Intensity Plants

a. Applications for financing covering exports for high carbon intensity plants that are located in the "World's Poorest Countries" as listed on Ex-Im Bank's web site at: [http/www.exim.gov/poorestcountries] [*See Attachment 1 for current list*] must be accompanied by each of the following:

i. Information demonstrating that the high carbon intensity plant will utilize the most efficient technology available. This represents the best internationally available technology ~~appropriate technology available in the country where the plant is located~~ and reflects ~~the capabilities of the country and~~ feasible options to produce power at the most efficient level practical. All design, engineering and plant operational characteristics will be taken into account, including the plant's boiler size and design, coal quality and characteristics, cooling system and emission controls. In the case of a retrofit or upgrade, the retrofit or upgrade must utilize the most efficient technology available as described above.

ii. An alternatives analysis demonstrating that there are no other economically feasible alternatives to the new high carbon intensity plant.[15] The analysis should include comparisons of the financial and economic cost of the plant with other viable sources of power and/or heat ~~available to the buyer~~ production or savings that have lower carbon intensities including renewable energy, end-use efficiency, transmission and distribution improvements, policy reforms or fossil fuels that produce lower levels of carbon emissions that could be an alternative to, supplement, or partial substitute for the power to be generated by the high carbon intensity plant. Economic costs should include risk factors and implicit or

[15] Feasible alternatives are those that are technologically feasible and commercially available, not necessarily those that are least market cost.

Comment [S7]: See discussion in section 4

Comment [S8]: Footnote is Treasury Coal Guidance language. See discussion in section 8.

Comment [S9]: See discussion in section 8.

Comment [S10]: See discussion in section 7.

explicit subsidies, including environmental and health externalities, and the social cost of carbon emissions, even if not quantified. It also should compare all technically available options to reduce or offset the plant's expected production of CO2 during its operation (including the option to deploy CCS) and take into account any current or projected costs associated with CO2 production such as fees, taxes, or regulatory compliance costs. In the case of a retrofit or upgrade, the alternatives analysis should compare the plant as retrofitted or upgraded to other sources of power as described above.

iii. An analysis of the expected level of CO2 production of the high carbon intensity plant that quantifies all direct emissions (Scope 1 emissions as defined in the Greenhouse Gas Protocol (http://www.ghgprotocol.org/standards) from the plant, including information demonstrating how the estimated amount of CO2 emissions was derived. Such information should include data related to the carbon content of the fuel source, the plant's projected availability and factors used in deriving the plant's level of efficiency.

iv. Information demonstrating ~~that the extent to which~~ the high carbon intensity plant will align with the objectives of any applicable low carbon growth plans of the country where it is located, including any mitigation measures contemplated, as reflected by the degree to which the plant may be designed as "CCS ready" or its output supplemented by renewable energy.

b. Applications for financing covering exports for high carbon intensity plants that are not located in the "World's Poorest Countries" (as described above) must be deployed with a carbon capture and sequestration (CCS) system sufficient to reduce the plant's equivalent carbon intensity to a level of 500 grams CO2/kWh or less. The CCS system must be fully functional within one year of a new plant's initial operation, or within one year of the completion of an upgrade or retrofit to an existing plant. In the post combustion CCS process, the CO2 from the emissions produced by the high carbon intensity plant must be separated from the emissions stream and transported to a storage site for the purpose of environmentally safe and permanent geological storage of the carbon. Alternately, a CCS system may be employed to capture and permanently store the CO2 produced by a coal gasification process, prior to the combustion of the processed gas (syngas) by the power plant, in which case the level of CCS must ~~should~~ be sufficient to reduce the combined carbon intensity of the gasifier and the power plant to a level of 500 grams CO2/kWh or less. Such CO2 must also be transported to a storage site for the purpose of environmentally safe and permanent geological storage of the carbon.

c. Applications for financing covering exports for coal mines that serve high carbon intensity plants must be accompanied by information demonstrating that the output of the mine will be sold exclusively to plants that are eligible for support under these Supplemental Guidelines.

III. Engagement of an Independent Environmental Consultant to Ex-Im Bank

The Engineering & Environment Division of Ex-Im Bank may retain ~~require the engagement of~~ an independent consultant ~~on behalf of Ex-Im Bank~~ at the expense of the buyer, among other things, to review the information submitted with the application for financing of exports in connection with the transaction under these Supplemental Guidelines. The consultant may supplement the information with additional information relevant to the plant's greenhouse gas production, as required by these Supplemental Guidelines and requested by Ex-Im Bank, in order to aid Ex-Im Bank in its analysis of the application for financing under these Supplemental Guidelines.

Comment [S11]: Treasury Coal Guidance language. See discussion in section 8.

Comment [S12]: See discussion in Section 10

Comment [S13]: See discussion in Section 9.

Comment [S14]: See discussion in Section 9.

Comment [S15]: See discussion in section 11.

Comment [S16]: See discussion in section 12.

ATTACHMENT 1: POOREST COUNTRIES

For purposes of the Supplemental Guidelines for High Carbon Intensity Projects, Ex-Im Bank considers the "poorest countries" to be those countries identified by the World Bank as the world's poorest countries based on (i) gross national income per capita~~, and (ii) in certain cases, the country's limited capacity to access credit from external sources,~~ Ex-Im Bank will review and amend, if necessary, its list of poorest countries annually, at the time the World Bank makes available its figures on per capita gross national income (usually published in June). As of June, 2013, Ex-Im Bank's list of poorest countries is set forth below:

.....

Comment [S17]: See discussion in section 13.

[COMMENTS FROM ROBERT GABOR, U.S. DEPARTMENT OF STATE]

Ex-Im Bank's Proposed Supplemental Guidelines for High Carbon Intensity Projects

Post-Meeting Comments:

- **Introduction: Definition of "economically feasible"**
  - Uncertain about what "economically feasible" means in this context; we understand and agree that least developed countries shouldn't necessarily be expected to build ultra-supercritical plants, but how does "economically feasible" relate to "best available" within coal technologies? Please clarify.

- **Section (I)(b): Definition of High Carbon Intensity Plants**
  - ***Item (I)(b) (Also in reference to Item (II)(b)):*** Is 650g CO_2/kWh a standard threshold for "high carbon"? In general, it would be more logical if the minimum threshold for "high carbon" were the same as the upper threshold for "low carbon." E.g. high carbon intensity could be defined as over 500g CO_2/kWh (i.e. consistent with the CCS threshold number). Also, we recommend that the 500g CO_2/kWh standard be periodically reviewed over time through an interagency mechanism to account for evolution in technology.

- **Section (I)(c): Items under "Supplemental Guidelines do <u>not</u> apply to:"**
  - ***Item (I)(c)(iii)*** – (1) The inclusion of projects that extend the useful life of coal plants seems to go further than the CAP and the Treasury guidelines for the MDBs. (2) What about situations where an increase in capacity is offset through efficiency measures that have the net effect of decreasing emissions?
    - Potentially insert: "...does not increase the capacity of the plants ***(unless the project's efficiency improvements offset the additional emissions associated with the increase in capacity)*** and/or extend its useful life..."

- **Section (II): Items under "Supplemental Guidelines for High Carbon Intensity Plants"**
  - **Item (II)(a)(i)** – To reflect the fact that "best available" should not be judged solely on what has been built *in* a country already but rather what is available *to* the country by equipment suppliers, we recommend this small edit: "This represents the best appropriate technology available ~~in~~ **to** the country where the plant is located and reflects the capabilities of the country and feasible options top roduce power at the most efficient level practical."
  - **Item (II)(a)(ii)** – To reflect the fact that an alternatives analysis should not just look at the cost of cleaner kinds of power but also the financing available to offset those higher costs, potentially insert: "The analysis should include: ***(a)*** comparisons of the financial cost of other viable sources of power and/or heat available to the buyer that have lower carbon intensities including renewable energy or fossil fuels that produce lower levels of carbon emissions that could be an alternative to, supplement, or partial substitute for the power to be generated by the high carbon intensity plant; ***(b)*** **"the availability of various forms of financing, including concessional financing, to cover incremental costs of lower carbon intensity alternatives."**

From: James Mahoney
Sent: Tuesday, November 05, 2013 4:57 PM
To: mandringa@vermeer.com
Cc: Stephen Parsons; Tracey Braun; Isabel Galdiz; Nicole Hutsell; K Koro Nuri; dbouwkamp@vermeer.com
Subject: RE: Exim Environmental Feedback

Dear Ms. Andringa,

Thank you for the comments you sent to Ex-Im Bank regarding the proposed revision of its Supplemental Guidelines for High Carbon Intensity Projects. On October 30 (last Wednesday), I along with the other members of Ex-Im Bank's Environmental Working Group met with exporters and trade associations to discuss the proposed revision and receive their comments, and we found that others had questions similar to the ones you raised in your message to us. The meeting was quite constructive, and we'll be considering changes to the proposed revision once the period for the submission of written comments closes on November 8.

Here are some answers to your questions based on the language of the current draft revision to the Supplemental Guidelines:

a: The only sales (exports) of products or services to existing equipment or plant that would be affected by these Supplemental Guidelines would be export sales that would materially extend the useful life of an existing coal fired power plant or materially increase its generating capacity. The sale of maintenance or operational spares, service parts, or pollution control devices, etc., are not covered by these guidelines and would not be impacted. (We are considering the addition of text to the draft revision in order to clarify this point.)

b: Coal mines are NOT affected in any way by these Supplemental Guidelines UNLESS they form part of a single project that consists of a new power plant and adjacent mine being developed under single ownership as a single, integrated project. These projects, often referred to as "mine-mouth power plants," generally are rare. All exports to existing coal mines, and all exports for new coal mines that are not tied to a single coal fired power plant or that are under separate ownership from the power plant ownership are not subject to these proposed guidelines.

c: As explained in my paragraph above, export sales to an existing coal fired power plant would not be affected, unless the sale was for purposes of materially extending the plant's useful life or materially increasing its generating capacity level, such as the replacement of the plant's boiler or its steam turbine.

Please note that these proposed changes constitute environmental guidelines only. Ex-Im Bank operates under an independent Board of Directors, who, when taking into account the environmental impact of projects including those that produce greenhouse gases, can follow their own judgment. As with any recommendation coming before Ex-Im's board, one cannot speculate on whether it will be approved by the Bank's independent Board of Directors. Finally, please understand that there have been only three applications for Ex-Im Bank financing of U.S. exports over the past decade that would have been impacted by these proposed guidelines. The President's Carbon Action Plan addresses only coal plants, not coal mines, and it is not the Bank's intent to expand in any way the scope of his initiative on the public funding of coal plants.

I hope this is of assistance to you. All of your comments will be considered, and they will be reported to the Bank's management and Board as we continue the process of formulating a recommendation for Board Action on a revision to the current Supplemental Environmental Guidelines for High Carbon Intensity Projects.

Regards,

James A. Mahoney
Vice President, Engineering and Environment
Export-Import Bank of the U.S.
Washington, D.C. 20571
+1 202 565-3573

From: Andringa, Mary [mailto:mandringa@vermeer.com]
Sent: Tuesday, October 22, 2013 10:27 AM
To: Enviro Specialist
Subject: Exim Environmental Feedback

To Exim Bank,

Thank you for the opportunity to provide comments as an Advisory Committee member on the proposed Supplemental Guidelines for High Carbon Intensity Projects.

I'll start off by stating that it was difficult to find much in this proposed Annex that I considered beneficial to Exim Bank, to US Exporters, to the US...and frankly, to the environment globally.

First, a request for clarification:
1. From our reading of the proposed annex, this rule appears to withhold support for US equipment and services sold to coal mines, coal-fired energy plants, and also for the construction/renovation of any coal mine or coal-fired energy plant? Have we read correctly?
2. Does this rule affect the sale of product or services to equipment or plant already in operation? For instance, does this affect support for service parts, maintenance parts, and service/consulting contracts to mines and plants already in existence? Example: Equipment was sold to a coal mine five years ago. It's now time for a major overhaul of the equipment. $5 million of parts and service support are required for this. Does this annex affect such a situation? Or, a coal-fired plant was built 20 years ago and now they would like to upgrade their emissions monitoring and containment systems. US companies have technology to upgrade the plant. Does this annex affect this situation?

Comments on Annex A-2:

1. The proposed rule directly opposes Exim Bank's first priority of supporting and growing US jobs. This proposed rule is designed to disallow support for US equipment and services exported for applications deemed to be less environmentally friendly than other applications. These projects will likely continue and jobs will still be generated, but they will not be US jobs as a result of this proposed rule.
2. Annex A-2 not only is concerning for US jobs, it also goes against another stated goal of Exim Bank and the Administration...the National Export Initiative.
3. The proposed rule seeks to provide a net environmental benefit by cutting off supply of goods and services to the singled-out coal industry. The rule will likely have the opposite effect. US products are usually produced in the most environmentally friendly way and often provide the most productivity for the given energy they consume, often resulting in fewer machines being used and less energy consumed for any amount of output desired. Likewise, US services offered to the global coal industry also tend to take environmental issues into account at a greater level than foreign, competitive offerings. Given that the coal industry globally will continue with or without the participation of US equipment and services, this proposed rule, which seeks to cut off US equipment and services to the global coal industry, would likely create the opposite of the intended result.
4. A rule that, by implication, says to many in the world, "your energy industry doesn't meet our standards...it's too dirty", will have a negative effect upon our relationship with trading partner countries. Closing a window of opportunity for our government and private sector to cooperate with foreign countries on their energy development continuum is not the right direction for our economic

security, national security, or national interest. And therefore this proposed rule goes against another Exim principle, that of our national interest.

5. Adding the role of Independent Environmental Consultant to Ex-Im Bank adds cost and adds steps in the process. From a lean perspective, this is the wrong direction.
6. Adopting a policy such as this will certainly dampen the appetite for many in the private sector to push for Ex-Im reauthorization.

We urge that the proposed Annex A-2 be dismissed and not adopted by Exim Bank.

Respectfully submitted,

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Attachment 8

Steps being taken to bring other ECAs into alignment with Ex-Im Bank's Supplemental Guidelines for High Carbon Intensity Projects

As Ex-Im Bank works to align its environmental guidelines with the President's Climate Action Plan, representatives of Ex-Im and the U.S. delegation to the OECD have begun negotiations at the November OECD meeting to adopt measures whereby all OECD export credit agencies would impose Guidelines similar to those proposed to be adopted by Ex-Im Bank with respect to the financing for new coal power plants and other high carbon intensity projects. While discussions continue at the OECD level, higher level discussions at Ministerial levels are beginning to be pursued, led principally by the State Department.

In September, during President Obama's visit to Sweden, the U.S. and the Nordic countries produced a Joint Statement announcing that "the leaders of Denmark, Finland, Iceland, Norway, and Sweden will join the United States in ending public financing for new coal-fired power plants overseas, except in rare circumstances." The full "Partnering on Climate Change and the Arctic" section of the Joint Statement can be found below.

"Partnering on Climate Change and the Arctic

Climate change is one of the foremost challenges for our future economic growth and well-being. We underscore the importance of continuing to encourage innovative approaches to promoting energy efficiency and clean energy, including renewables, and of taking action on climate change, domestically and internationally. This requires mobilizing scaled up climate finance. We agreed on the importance of reaching an ambitious, comprehensive, fair, and inclusive climate agreement under the United Nations Framework Convention on Climate Change in 2015 that is consistent with science, mindful of the two degree target, and applicable to all.

As part of our commitment to accelerating the transition to low-carbon energy systems worldwide, *the leaders of Denmark, Finland, Iceland, Norway, and Sweden will join the United States in ending public financing for new coal-fired power plants overseas, except in rare circumstances*. We will work together to secure the support of other countries and multilateral development banks to adopt similar policies. The Nordic countries and the United States agreed to continue their work, in all appropriate channels, to reduce the use of domestic fossil fuel subsidies globally. The United States also agrees to join with the Nordic members of the Friends of Fossil Fuel Subsidy Reform to undertake peer reviews of domestic fossil fuel subsidies."